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June 12, 2000

Robert D. Wilson, CHMM
Manager
Environmental Operations & Customer Support

Director, National Program Chemicals Division
(NPCD) (7407)
Office of Pollution Prevention and Toxics
401 M Street, S.W.
Washington, D.C.

Dear Director:

KeySpan Energy in conjunction with Miller Environmental Group is pleased to submit for your review supporting documentation for validation of a solvent soaking process for decontamination of natural gas pipeline contaminated with polychlorinated biphenyls.

The study was conducted in accordance with Part 761 of Title 40 of the Code of Federal Regulations (40 CFR Part 761) Subpart T - Comparison Study for Validating a New Performance-Based Decontamination Solvent Under 761.79 (d)(4).

If you have any questions or would like to discuss the study, please do not hesitate to call me (718) 963-5420.

Sincerely,

Robert D. Wilson
Manager
Environmental Operations & Customer Support

cc: David Greenlaw, USEPA Region II
Kenneth Meade, Hale & Dorr
James Davey, Miller Environmental Group
Brian McCaffrey, KeySpan Energy



15 | 100 w
PCB Solvent Decontamination Validation Study
Package Index

Section 1

Standard Operating Procedure

Validation Criteria for the Use of Solvents for PCB Decontamination
BL-ORG-221

PCB Wipe Sampling Technique
BL-ORG-220

Section 2

Solvent Material Safety Data Sheets

Section 3

QA Summary Results

Section 4

Solution Prep Logs

Section 5

Aroclor 1242 Standard with Plastic Overlay

Section 6

Raw Data

Extraction Log – Cold Temperature
Analysis Log – Cold Temperature
Chromatograms

Extraction Log – Room and Hot Temperature
Analysis Log – Room and Hot Temperature
Chromatograms

CONTENTS

Standard Operating Procedures **1**

Solvent Material Safety Data Sheets **2**

QA Summary Results **3**

Solution Prep Logs **4**

Aroclor 1242 Standard W/Plastic Overlay **5**

Raw Data **6**

7

8

Tab 1

Standard Operating Procedure	SOP No. BL-OR-221	Revision No. 0
Title: Validation Criteria Set for Performance Based Decontamination of PCB's using Select Solvents	Page 1 of 4	Revision Date

Approved: Technical Director

Date: 6/16/00

Approved: QC Officer

Renee Cohen 6/16/00

Date:

1.0 IDENTIFICATION OF THE TEST METHOD: VALIDATION CONDITIONS SET FOR PERFORMANCE BASED DECONTAMINATION OF PCB'S USING SELECT SOLVENTS.

2.0 APPLICABLE MATRIX OR MATRICES

2.1 Wipe Samples

3.0 METHOD DETECTION LIMIT: Not Applicable

4.0 SCOPE AND APPLICATION

4.1 This method provides self-implementing criteria for validating conditions for use on performance-based decontamination of solvents. These materials include non-porous internal surfaces of gas pipelines, meters and empty vessels.

4.2 The validation procedure is used to assure the scientific integrity of the method/use.

4.3 The Enviroclean solution (aqueous mixture of Terpene Hydrocarbons) has been tested at room-temperature, refrigerated and heated to simulate conditions at different times of the year.

5 SUMMARY OF THE TEST METHOD

5.1 Clean steel plates are soaked with fortified PCB solution. The steel plates are then soaked in the Enviroclean solution. The plates are wiped and the wipes are analyzed to verify that the PCB's were removed using the Enviroclean solution.

6.0 DEFINITIONS – Not Applicable

7.0 INTERFERENCES

8.0 SAFETY

8.1 The health and safety of laboratory personnel while providing analytical services is most important to KeySpan Energy.

8.2 Protective clothing and equipment (safety glasses, gloves, lab coats, fumehoods etc.) are provided to all laboratory employees and must be worn during analysis of samples.

8.3 All health and safety issues are addressed in this SOP document as well as the Laboratory Operations Chemical Hygiene Plan (CHP). All health and safety aspects of environmental analysis must conform to the approved CHP.

Standard Operating Procedure

SOP No.
BL-OR-221Revision No.
0Title: Validation Criteria Set for Performance
Based Decontamination of PCB's using Select
Solvents

Page 2 of 4

Revision
Date

Approved: Technical Director

Date: 6/16/00

Approved: QC Officer

Date:

6/16/00

8.0 SAFETY (cont'd)

- 8.4 Material Safety Data Sheets (MSDS) are filed in the Environmental Safety Office and the laboratory work area in the Brooklyn laboratory and in the Conference Room at the Glenwood laboratory where they are available for review by the analyst at all times. All analysts should be aware of the safety and health precautions and concerns associated with each chemical/reagent used during laboratory analysis.

9.0 EQUIPMENT AND SUPPLIES

- 9.1 Glass Beakers
9.2 Shallow Glass Dishes
9.3 Syringe
9.4 Aluminum Tins for soaking
9.5 Steel Plates (5 x 5) – to allow for area of a 100 cm² area to a PCB Wipe Area
9.6 Plates from Welding Shop – Cleaned with Hexane prior to use. Numbers etched 1 to 13 prior to use.
9.7 Sterilized Wipe/Gauze samples

10.0 REAGENTS AND STANDARDS

- 10.1 PCB Spike Material – Aroclor 1242 (10,000 mg/kg)
10.2 Soaking solvent (Enviroclean 10%)
10.2.1 Enviroclean Solution – Room Temperature (24 Degrees C)
10.2.2 Enviroclean Solution – Refrigerated (4 Degrees C)
10.2.3 Enviroclean Solution – Heated (37 Degrees C)

11.0 SAMPLE COLLECTION, PRESERVATION, SHIPMENT AND STORAGE

- 11.1 Wipe samples are extracted and analyzed as soon as the fortification procedure is complete.

12.0 QUALITY CONTROL

- 12.1 Temperature and Pressure – Conduct the validation and perform decontamination at room temperature. (≥ 15 degrees C through ≤ 30 degrees C) and at atmospheric pressure.

- 12.2 Agitation – Limit the movement in the solvent to short-term movement when placing the contaminated surface into the soak solvent and when removing the surface from the soak solvent.

- 12.2.1 Solvent Volume/Surface Area Determination – method requires complete immersion of the contaminated surface.

- 12.3 Time of Soak – Soak for a minimum of four (4) hours

- 12.4 Surface Conditions for the Validation Study – Ensure that there are no free-flowing liquids on surfaces and that surfaces are dry.

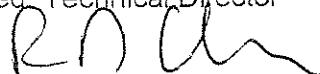
- 12.5 Confirmatory Sampling for the Validation Study – Select surface sample locations using representative sampling procedures.

Title: Validation Criteria Set for Performance
Based Decontamination of PCB's using Select
Solvents

Page 3 of 4

Revision
Date

Approved: Technical Director



Date: 6/16/00

Approved: QC Officer

Date:



12.0 QUALITY CONTROL (cont'd)

- 12.6 Use the Standard Wipe Test, "Wipe Sampling and Double Wash/Rinse Cleanup as Recommended by the EPA PCB Spill Cleanup Policy.
- 12.7 Concentration – The validated method may only be used to decontaminate surfaces containing PCB's at concentrations (or lower) on which the study was performed.
- 12.8 A clean plate (control sample) is wiped, extracted and analyzed to confirm that the steel plates are free of PCB'S prior to the start of the study.
- 12.9 One plate is fortified with the Aroclor spike solution and wiped prior to the Enviroclean soaking process to confirm that the spike procedure and wipe procedure recovers the spike solution.

13.0 CALIBRATION AND STANDARDIZATION

- 13.1 A blank steel plate (control sample) is placed in the soaking solution with the spiked steel plates. Analysis of the blank steel plate is used to verify that the Enviroclean solution does not add contaminants to the steel plates that are to be wiped.
- 13.2 The approximately 10,000 mg/kg Aroclor 1242 standard is analyzed to verify the concentration of the solution utilized to fortify the steel plates.

14.0 PROCEDURE

- 14.1 A spiking solution containing 13,000 mg/kg of Aroclor1242 was prepared.
- 14.2 The spiking solution is added to the pre-cleaned clean steel surface using a syringe.
- 14.3 Allow the spiking solution to drip or drain off the surface prior to beginning the study.
- 14.2 Contaminate a minimum of ten (10) surface areas.
- 14.3 Plates are left to dry 1-2 hours prior to the study.
- 14.4 Place the contaminated steel plates in the aluminum tins. Add the Enviroclean solution to the tin. Fill the tins to the top with the Enviroclean solution. Approximately 4 liters to each tin to completely immerse the plates.
- 14.5 Allow all plates to soak for four (4) hours.
- 14.6 Remove plates and allow to dry prior to wiping.
- 14.7 Place the wipe template over the plate and wipe each plate in accordance with PCB Wipe Sampling Procedure (BL-ORG-220)
- 14.8 Extract wipe sample in accordance with the noted SOP.
- 14.9 Analyze sample extract in accordance with EPA Method 8082.
- 14.10 Procedures are to be repeated at each of the three (3) temperature ranges specified in the reagent section of the SOP.

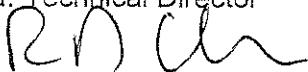
15.0 CALCULATIONS – Not Applicable

16.0 METHOD PERFORMANCE

17.0 POLLUTION PREVENTION

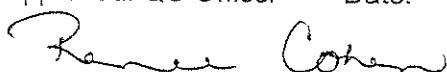
Standard Operating Procedure	SOP No. BL-OR-221	Revision No. 0
Title: Validation Criteria Set for Performance Based Decontamination of PCB's using Select Solvents	Page 4 of 4	Revision Date

Approved: Technical Director



Date: 6/16/00

Approved: QC Officer



Date: 6/16/00

- 18.0 DATA ASSESSMENT AND ACCEPTANCE CRITERIA FOR QC MEASURES
- 18.1 Acceptable data consists of steel plate wipe analysis containing < 10 ug/cm² PCB.
- 19.0 CORRECTIVE ACTIONS FOR OUT-OF-CONTROL OR UNACCEPTABLE DATA
- 20.0 CONTINGENCIES
- 21.0 WASTE MANAGEMENT
 - 21.1 Waste Enviroclean Solution is analyzed for PCB concentration. The solution is disposed of in accordance with applicable State, Federal and Local regulations.
- 22.0 REFERENCES
 - 22.1 Fedreal Register – Volume 63, June 1998 (Prepublication Copy)
 - 22.2 Wipe Sampling and Double Wash/Rinse Cleanup as Recommended by the EPA PCB Spill Cleanup Policy, June 23, 1987, revised April 1991.
 - 22.3 KeySpan Energy System Laboratory SOP – BL-ORG-220

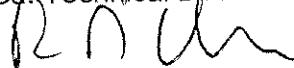
Standard Operating ProcedureSOP No.
BL-OR-220Revision No.
0

Title: PCB Wipe Sampling Technique

Page 1 of 5

Revision
Date

Approved: Technical Director



Date: 6/16/00

Approved: QC Officer



Date:

6/16/00

1.0 IDENTIFICATION OF THE TEST METHOD: PROCEDURE FOR THE COLLECTION OF SURFACE WIPE SAMPLES FOR PCB ANALYSIS**2.0 APPLICABLE MATRIX OR MATRICES**

2.1 This method of sampling is applicable to gauze wipes. Sample results are reported in ug/100cm².

3.0 METHOD DETECTION LIMIT**4.0 SCOPE & APPLICATION**

4.1 This procedure outlines the method for collecting PCB Wipe Samples. The Wipe Sampling technique is the most apparent way to determine PCB concentrations on smooth, "impervious" surfaces.

5.0 SUMMARY OF THE TEST METHOD

5.1 Hexane is added to a sterile gauze pad. This gauze pad is then wiped over a specified area. The gauze pad is collected and delivered to the laboratory for analysis in accordance with approved EPA Methods.

6.0 DEFINITIONS**7.0 INTERFERENCES**

7.1 If liquid is present on the surface to be wipe sampled, it should be sampled using a standard liquid sample vial, and then drained or otherwise removed (without wiping) before a wipe sample is taken. The excess liquid must be handled as suspected PCB contaminated waste and disposed of accordingly.

7.2 As an alternative to taking sequential wipe samples from an area at the bottom of a pipeline with very heavy localized deposition, the sampler may take single wipe from an area with less deposition adjacent to the bottom of the pipeline, in order to actually wipe the pipe surface. The wipe sampling area should be described as accurately as possible on the Chain of custody form.

7.3 Any contaminated rags, gloves, etc., should be placed in a plastic bag and disposed of as PCB solid waste.

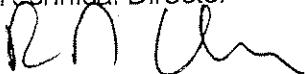
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8.1 The health and safety of laboratory personnel while providing analytical services is most important to KeySpan Energy.

8.2 Protective clothing and equipment (safety glasses, gloves, lab coats, fumehoods etc.) are provided to all laboratory employees and must be worn during analysis of samples.

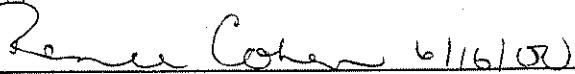
Standard Operating Procedure	SOP No. BL-OR-220	Revision No. 0
Title: PCB Wipe Sampling Technique	Page 2 of 5	Revision Date

Approved: Technical Director



Date: 6/16/00

Approved: QC Officer

Renee Cohen 6/16/00

Date:

8.0 SAFETY (cont'd)

8.3 All health and safety issues are addressed in this SOP document as well as the Laboratory Operations Chemical Hygiene Plan (CHP). All health and safety aspects of environmental analysis must conform to the approved CHP.

8.4 Material Safety Data Sheets (MSDS) are filed in the Environmental Safety Office and the laboratory work area in the Brooklyn laboratory and in the Conference Room at the Glenwood laboratory where they are available for review by the analyst at all times. All analysts should be aware of the safety and health precautions and concerns associated with each chemical/reagent used during laboratory analysis.

9.0 EQUIPMENT AND SUPPLIES

- 9.1 Safety Glasses
- 9.2 Disosable gloves
- 9.3 Chalk for marking surfaces
- 9.4 Two teflon templates (10 cm x 10 cm and 5 cm by 5 cm) or metal ruler
- 9.5 10 ml graduated cylinder
- 9.6 Teflon squeeze bottle
- 9.7 40 ml pre-cleaned I-Chem sample bottles with teflon lined lids.
- 9.8 3" x 3" sterilized, individually wrapped gauze pads.
- 9.9 Teflon Coated Tweezers
- 9.10 1 1/2" Teflon Tape
- 9.11 Parafilm
- 9.12 Plastic Bags with ties
- 9.13 Labels
- 9.14 Clean rags

10.0 REAGENTS AND STANDARDS

- 10.1 Reagent grade Hexane

11.0 SAMPLE COLLECTION, PRESERVATION, SHIPMENT AND STORAGE

- 11.1 Wipe Samples are collected in accordance with Section 14 of this SOP.
- 11.2 Wipe Samples are to be extracted within 14 days of sample collection.
- 11.3 Wipe Sample extracts are to be analyzed within 40 days of sample collection.

Standard Operating Procedure	SOP No. BL-OR-220	Revision No. 0
Title: PCB Wipe Sampling Technique	Page 3 of 5	Revision Date

Approved: Technical Director

Date: 6/16/05

Approved: QC Officer

Renee Cohen 6/16/05

Date:

12.0 QUALITY CONTROL

12.1 Several types of quality control (QC) samples should be used. Each type of sample provides an indication of the reliability of a part of the sampling and analysis process. Quality control samples should not be identified as QC samples when submitted to the analytical laboratory.

12.1.1 Field Blanks

At least 5% of the total samples, shall be collected using clean gloved hands and pre-soaked gauze or glass wool. Remove the cap from the sample container for the estimated time (record the time) for a normal wipe sample, allow the gauze or glass wool to air dry without applying it to any surface. After this is done then close and seal the sample container as described in Section 14.1.5 and label in accordance with section 14.1.6.

Use the wipe sample procedure outlined in Section 14.1.1 through 14.1.7 to wipe areas near the sample site which are not expected to be contaminated.

12.1.2 Duplicates

At least 5% of the total samples, shall be collected. Double wipe at least two sample sites, using the steps outlined in Section 14.1.1 through 14.1.7 or 14.2, label which was the first and which was the second wipe of each of the two sets, for each kind of surface sampled.

12.1.3 Matrix Spikes

A minimum of 5% of the total samples shall be collected for Matrix Spike Analysis (MS). Remove pre-soaked sterile gauze pad that was wiped in the field. Spike the guaze with seventy five (75) microliters (75 ul) of a known concentration of PCBs. Let the gauze or glass wool air dry and then place it into a clean dry sample container. Close the sample container as outlined in Section 14.1.5.

13.0 CALIBRATION AND STANDARDIZATION – Not Applicable

14.0 PROCEDURE

14.1 Visual inspection of the surface to be sampled is required in order to determine whether disposition on the surface is slight (minimum visible contamination) or heavy (layers of visible contamination) in appearance. Once this is determined, then use the following procedure to collect PCB wipe samples.

14.2 Mark the exact site with a template or ruler.

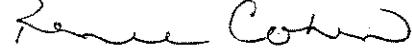
Standard Operating Procedure	SOP No. BL-OR-220	Revision No. 0
Title: PCB Wipe Sampling Technique	Page 4 of 5	Revision Date

Approved: Technical Director



Date: 6/16/00

Approved: QC Officer

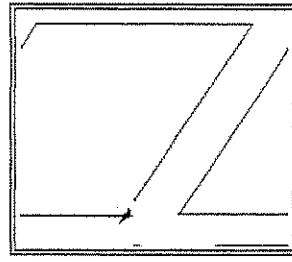
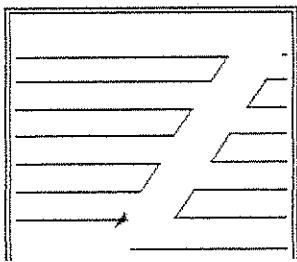


Date:

6/16/00

14.2 Slight Surface Coating (Minimum visible contamination)

14.2.1 Prior to sampling, put on safety glasses and two pairs of disposable gloves. Discard outer pair between samples, to avoid cross contamination. Pre-soak the gauze pad 10.0 ml Hexane in a 40 ml pre-cleaned I-Chem VOA vial.



14.2.2 If the available surface area is large enough, mark the collection area (sampling grid) with chalk on the surface of the object, using a standard template ($10\text{ cm} \times 10\text{ cm} = 100\text{ cm}^2$). Use the smaller template ($5\text{ cm} \times 5\text{ cm} = 25\text{ cm}^2$) if the available surface area is too small for the standard template.

14.2.3 Remove the pre-soaked gauze pad from the 40 ml container with teflon coated tweezers. Squeeze out any excess solvent. Allow the gauze to air dry prior to use.

14.2.4 While holding the gauze pad in gloved fingers, wipe the entire sampling area from left to right in rows from top to bottom and then again in columns from top to bottom from the left side to right side. Then wipe the perimeter of the sample area, as shown below:

14.2.5 Use only one pad per sampling grid and place the used gauze or glass wool into the 40 ml VOA vial/container, and tightly screw the lid closed. Seal the sample container with parafilm or teflon tape, then place the sample in a plastic bag and tie the bag shut.

14.2.6 Label the sample container appropriately. A blank must always be collected for each wipe sampling episode in order to ensure quality of the data. To collect a wipe sample field blank, see Section 12.1.1 for more details.

14.2.7 Complete the Chain of Custody form documenting sampling details and the actual surface area of the wipe sample.

14.3 Heavy Surface Coating (Layers of visible contamination)

14.3.1 If the surface of the object appears to be heavily coated, follow Steps 14.2.1 through 14.2.7, to obtain the first wipe sample.

14.3.2 Use a brand new pad, take a second wipe sample from the same sampling grid, by repeating steps 14.2.1 through 4.2.7.

14.3.3 A separate sample identification number must be used for the companion wipe sample.

15.0 CALCULATIONS

- 15.1 Upon receipt of the wipe sample at the laboratory, the gauze pad is spiked with surrogate solution. This is used to monitor the efficiency of the extraction technique.
- 15.2 5 ul of 20 ug/ml surrogate solution is added to the gauze pad using a class "A" syring.
- 15.3 The gauze pad is rinsed with 40 ml's of Hexane three times for a total wash volume of approx. 120 mls. The solvent is then extracted in accordance with approved EPA Methods.\

16.0 METHOD PERFORMANCE

17.0 POLLUTION PREVENTION

18.0 DATA ASSESSMENT AND ACCEPTANCE CRITERIA FOR QC MEASURES

18.1 The Method blank (wipe) sample associated with the prep batch should not contain PCB's at a concentration above the reporting limit. If PCB's are detected in the method blank associated with the data set, sample results are to be qualified and the supervisor notified immediately.

18.2 The Matrix Spike recovery is calculated in terms of Percent Recovery (%). Acceptable recoveries have been set at +/-30%.

19.0 CORRECTIVE ACTIONS FOR OUT OF CONTROL DATA

20.0 CONTINGENCIES

21.0 WASTE MANAGEMENT

21.1 All waste Guaze Pads and associated sample containers are to be disposed of in PCB containing waste drums at the laboratory.

22.0 REFERENCES

22.1 Wipe Sampling and Double Wash/Rinse Cleanup as Recommended by the EPA PCB Spill Cleanup Policy, June 23, 1987, Revised and Clarified April 18, 1991.

A handwritten signature, possibly 'M', enclosed in a circle.

Tab 2

MATERIAL SAFETY DATA SHEET

MATERIAL SAFETY DATA SHEET

ENVIRO – CLEAN

Date Prepared: January 2000
Prepared By: Enviro Jet Technologies & Lichem Inc.
Page: 1 of 4

SECTION 1: Product Identification & Emergency Information

PRODUCT NAME: ENVIRO CLEAN

GENERAL USE: CLEANING, DEGREASING, PCB PODF

PRODUCT DESCRIPTION: CITRUS BASED SOLVENT

GENERIC INGREDIENTS: WATER, d-LIMONENE, SURFACTANTS, COUPLING AGENTS, TERPENE HYDROCARBONS

EMERGENCY TELEPHONE NUMBER(S):

ENVIRO JET: (631) 369 – 4900

LICHEM INC: (800) 479 - 6365

SECTION 2: Hazardous Ingredients / Identity Information

HAZARDOUS COMPONENTS	OSHA PEL	ACGIH TLV	OTHER LIMITS	PERCENT OPTIONAL
d-Limonene CAS# 5989-27-5	Not Listed	Not Listed		
** Nonylphenol Ethoxylate CAS# 9016-45-9	NA	NA		< 10

** Nonylphenol Ethoxylate contains traces of Residual Ethylene Oxide that is subject to SARA 302/304. Glycol ethers are subject to SARA Section 311, listed by California Prop 65 and subject to Right To Know laws in Pennsylvania and Massachusetts.

ENVIRO – CLEAN MSDS

Date Prepared: June 1999
Prepared By: Enviro Jet Technologies & Lichem Inc.
Page: 2 of 4

SECTION 3: Health Information & Protection

EMERGENCY OVERVIEW:

Clear amber to translucent liquid with citrus odor.

POTENTIAL HEALTH EFFECTS:

ROUTES OF ENTRY:

Inhalation NO
Skin MODERATE
Ingestion YES

HEALTH HAZARDS (ACUTE & CHRONIC):

This product may cause extreme discomfort and damage the eyes, mild irritation to the skin and should never be ingested.

Carcinogenicity: NOT LISTED

ARC Monographs: NOT LISTED

OSHA Regulated: NOT REGULATED

Medical Conditions Generally Aggravated By Exposure: NONE KNOWN

EMERGENCY & FIRST AID PROCEDURES:

Eyes Contact: Flush eyes with large amounts of water.

Skin Contact: Flush skin with large amounts of water.

Ingestion: If swallowed, drink plenty of milk or water and call Physician.

WORK PLACE EXPOSURE CONTROLS:

Personal Protection: Safety glasses are recommended for all work place conditions. Other protective gear including splash proof goggles or face shield, rubber boots & gloves, apron or rain gear should be worn depending on how and at what dilution rate the product is used.

Ventilation: None needed under normal use conditions. For enclosed areas with poor ventilation or when large quantities of product are used, the use of fans or other mechanical ventilation devices is recommended.

ENVIRO – CLEAN MSDS

Date Prepared: June 1999
Prepared By: Enviro Jet Technologies & Lichem Inc.

SECTION 4: Fire & Explosion Hazards

FLASH POINT: > 200° FTCC (CLOSED CUP)

FLAMMABLE LIMITS: Not Applicable

EXTINGUISHING MEDIA: Foam, CO₂, Dry Chemical, Water, etc.

SPECIAL FIRE FIGHTING PROCEDURES: Full protective gear should be worn when fighting all fires involving chemicals.

UNUSUAL FIRE & EXPLOSION HAZARDS: None

STABILITY: Unstable || Stable || Conditions to avoid: None

INCOMPATIBILITY (MATERIALS TO AVOID): Unknown Chemicals

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: None

HAZARDOUS POLYMERIZATION: May Occur || Will Not Occur || Conditions to avoid: None

SECTION 5: Spill Control Measures

LAND SPILLS:

For small spills use absorbent materials such as towels or absorbent powders. Put all material in proper waste disposal container with lid tightly covered. For large spills or dyke spills recover free flowing liquid and use absorbent material to dry area. Rinse area with water.

WATER SPILL:

Remove product from water surface by skimming or with suitable absorbents. This product contains surfactants that will cause it to disperse in water. Check with local environmental regulatory agencies for reporting requirements.

SECTION 6: Handling & Storage

STORING & HANDLING PRECAUTIONS:

Don not store above 120° F.

Product will freeze. Take precautions to keep from freezing.

OTHER PRECAUTIONS:

Keep container closed when not in use.

ENVIRO – CLEAN

Date Prepared: June 1999

Prepared By: Enviro Jet Technologies & Lichem Inc.

Page: 4 of 4

SECTION 7: Physical & Chemical Characteristics

BOILING POINT: 212° F

VAPOR DENSITY: >1 (Air = 1)

SOLUBILITY IN WATER: Complete

VOLATILE ORGANIC COMPOUNDS: < 5%

SPECIFIC GRAVITY: 1.030 (Water = 1)

PH @ 1%: 11 +/- 0.5

EVAPORATION RATE: >1 (Butyl Acetate = 1)

APPEARANCE & ODOR: Orange to Amber Liquid, Strong Citrus Odor

SECTION 8: Reactivity Data

GENERAL:

This product is stable and hazardous polymerization will not occur.

INCOMPATIBLE MATERIALS & CONDITIONS TO AVOID:

Unknown Chemicals.

SECTION 9: Regulatory Information

HEALTH RATING: 1

FLAMMABILITY: 0

REACTIVITY: 0

FLASH POINT: 200° F FTCC

DEPARTMENT OF TRANSPORTATION (DOT):

SHIPPING CLASSIFICATION: Compound cleaning liquid

DOT PLACARD: Not Required

TSCA:

The ingredients in this product are listed on the TSCA inventory.

CERCLA:

This product contains no CERCLA reportable materials.

Tab 3

QA SUMMARY RESULTS AFTER SOAKING



Cold Temperature Study – Performed at 4 Degrees C

Plate ID # PCB Concentration Detected
(AR1242 ug/100 cm²)

1	6.18
2	2.01
3	2.72
4	3.37
5	1.63
6	<2.0
7	<2.0
8	<2.0
9	<2.0
10	<2.0
11	4.59

Arithmetic Mean = 1.86 ug/100 cm²

Validation Study Passed

Blank Plate Result <2.0
Spike Control Plate Result 1170 (AR1242 ug/100 cm²)

Hot Temperature Study Performed at 37 Degrees C

Plate ID # PCB Concentration Detected
(AR1242 ug/100 cm²)

1	<2.0
2	2.76
3	<2.0
4	2.60
5	4.93
6	<2.0
7	<2.0
8	<2.0
9	<2.0
10	2.74
11	2.94

Arithmetic Mean = 1.45 ug/100 cm²

Validation Study Passed

Blank Plate Result <2.0
Spike Control Plate Result 1780 (AR1242 ug/100 cm²)

Room Temperature Study Performed at 24 Degrees C

Plate ID #	<u>PCB Concentration Detected</u> (AR1242 ug/100 cm ²)
------------	---

1	2.77
2	<2.0
3	<2.0
4	<2.0
6	<2.0
7	<2.0
8	<2.0
9	<2.0
10	<2.0
11	<2.0

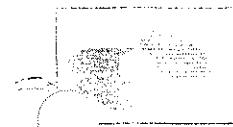
Arithmetic Mean = 0.277 ug/100 cm²

Validation Study Passed

Blank Plate Result <2.0

Spike Control Plate Result 3090 (AR1242 ug/100 cm²)

Tab 4



Brooklyn Union Lab

Intermediate Solution

Solution : 190 A B C C L R
1242

Date: 5/5/00

Chemist : N. COT. CELLI

Solvent: DIESEL FUEL

Solution : 109; ENV~~not~~^{CLEAN} R.K
Date : 5/16/00 5/18/00

Chemist : R. Kausen

Solvent: H_2O

Brooklyn Union Lab

Intermediate Solution

Solution: 10% Enviro-Sol, Date: 5/21/00

Chemist : R. KAUBENR

Solvent: H₂O

Solution: ENVINOSOFT SOL. Date: 5/30/00

Chemist: R. K. BENDER

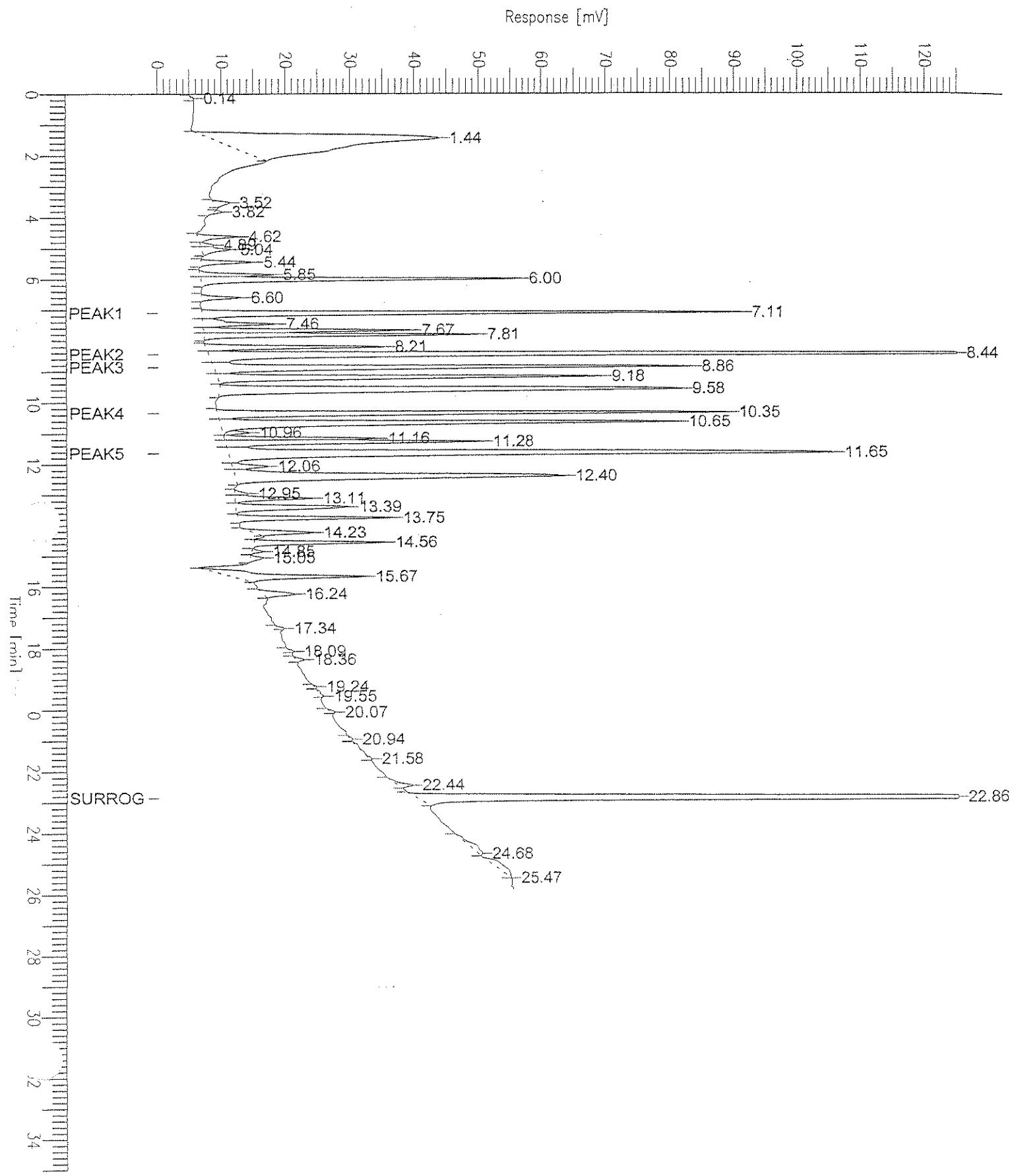
Solvent: H_2O

Tab 5

AROCLOR 1242 STANDARD WITH OVERLAY

Sample Name : 1242-50
fileName : C:\TC4\LEO\31WP007.raw
ethod : 1242
start Time : 0.00 min End Time : 35.00 min
ractor: 0.0 Plot Offset: 0 mV

Sample #: 7 Page 1 of 1
Date : 5/31/00 03:22 PM
Time of Injection: 5/31/00 02:56 PM
Low Point : 0.00 mV High Point : 125.00 mV
Plot Scale: 125.0 mV



Tab 6

**EXTRACTION LOG
COLD TEMPERATURE**

PCB WIPES EXTRACTION LOG SHEET

Prep. date: 5/25/00
Analyst ID: 6020
USA = Unspiked Sample

Solvent: Hexane Manufacturer: _____
 Lot # _____

032

SA = Unspiked Sample

Sample ID	Sample Vol (mL)	Surrogate ID	MS/MS DID	Final Spike Volume	Final Volume (mL)	Comments
Blank						
LCS	920	.140	5mL		25mL	
		-SA				
		-MSD				
		Wipe plate #12	1-wipe	5mL	25mL	Cold (Temp)
"	"	#13				
"	"	#1				
"	"	#2				
"	"	#3				
"	"	#4				
"	"	#5				
"	"	#6				
"	"	#7				
"	"	#8				
"	"	#9				
"	"	#10				
"	"	#11				

Sep Pak
Manufacturer Waters
Lot # 1170T

All samples are cleaned with sulfuric acid (5mls H₂SO₄ 25ml extract)
H₂SO₄ Manufacturer: JT Baker
Lot # 415033
LCS Ma Lot #

F:\LAB\PELW.WK4

QC BATCH: rev. 1.0 03/31/2000

**ANALYSIS RUN LOG
COLD TEMPERATURE**

(cold Temp.)

GC INJECTION LOG

DATE: 5/25/00

SEQUENCE NAME: May PIE

INSTRUMENT:

FID

LAB #	INJECTION #	SAMPLE DESCRIPTION	DILUTION	REF STAND	REFERS TO SPike	SURROGATE	PUBLICATION	SPike (EVERY 20 SAMPLE)	COMMENTS
	WZSP001	1242-50	50	47.1	.0261				1242-50
Lot # 9202	002	Blank	<2	0.327					
BLO00050516	003	Lcs-Soil	72.5	0.319					
5065-MS	004	Soil	<2	0.284					
5065-MSD	005	Soil-MS	<2	0.325	—				51.9
3000-5057	006	Soil-MSD	—	—	0.316	56.5			
BLO005058	007	Soil	<2	0.319	—				
BLO005059	008	—	<2	0.327					
010	1242-50	50	69.8	0.343					
011	Blank	<2	0.327						
wipe plate #12	012	PC-D-WN/PC	116.6	0.290					1242 - Avg /100cm ²
wipe plate #13	013	Blank	8.19	0.385	(Carry-over)				1242 - mg/Kg
Lot # 9202	014	PC-B-NSP	<2	0.308					1242 - mg /100cm ²
wipe plate #	015	Lcs-Soil Bello	69.3	0.257					1242 - mg /Kg
wipe plate #	016	pers-wipe	6.18	0.252					1242 mg /100cm ²
" " #2	017	—	2.01	0.266					
" " #3	018	—	2.72	0.267					
" " #4	019	—	3.37	ND					
" " #5	020	—	1.63	0.264					
" " #6	021	—	<2	0.025					
" " #7	022	—	<2	0.317					
" " #8	023	—	<2	0.251					

* OR MONTHLY

ANALYST: L. Turner

COMPLETION DATE: 5/30/00

GC INVESTIGATION LOG

5/25/00

DATE:

SEQUENCE NAME:

Mayfee

INSTRUMENT:

DE

DATE:	INJECTION #	SAMPLE DESCRIPTION	DLUTION	STAND	FREE	RESULTS	SURROGATE	DUPPLICATE	SPIKE	COMMENTS
LAB #					ALL	EVERY 200	EVERY 200	EVERY 200	EVERY 200	
						SAMPLE	SAMPLE	SAMPLE	SAMPLE	
1/27/02	Wire Plate #9 W25P024	PCB-wire			<2	0.268				1242-14y/1000
" " #10	025				4.2	0.244				
" " #11	026				4.59	0.273				
" "	027	1242-50			50	71.9	.0357			1242-14y/1000
" "	028	Blank			<2	0.016				

* OR MONTHLY

ANALYST:

L.-H. Müller

COMPLETION DATE:

5 / 30 00

**RAW DATA
COLD TEMPERATURE**

urbochrom Sequence File : C:\TC4\LEO\MAYPE.SEQ
 reated by : bk on : 5/25/00 02:14 PM
 dited by : LVT on : 5/25/00 05:34 PM
 scription : PE PCB Analysis

Copy

umber of Times Edited : 7

COLD

quence File Header Information:

Number of Rows : 28
 Instrument Type : PE AutoSystem GC with Built In Autosampler
 Injection Type : SINGLE

Row	Type	Sample Name	Sample Number	Sequence Sample Descriptions - Channel A								
				Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend	Norm. factor
1	Sample	1242-50	1	ccv	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
2	Sample	Method Blank	2	Blank	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
3	Sample	LCS-Soil	3	Lot # 9201	1.000	1.000	1.000	1.000	0.250	0.140	0.000	100.000
4	Sample	BL0005056	4	Soil	1.000	1.000	1.000	1.000	0.250	0.623	0.000	100.000
5	Sample	BL0005056-MS	5	Soil-MS	1.000	1.000	1.000	1.000	0.250	8.475	0.000	100.000
6	Sample	BL0005056-MSD	6	Soil-MSD	1.000	1.000	1.000	1.000	0.250	8.264	0.000	100.000
7	Sample	BL0005057	7	Soil	1.000	1.000	1.000	1.000	0.250	8.552	0.000	100.000
8	Sample	BL0005058	8	Soil	1.000	1.000	1.000	1.000	0.250	9.946	0.000	100.000
9	Sample	BL0005059	9	Soil	1.000	1.000	1.000	1.000	0.250	9.571	0.000	100.000
10	Sample	1242-50	10	ccv	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
11	Sample	Method Blank	11	Blank	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
12	Sample	Wipe Plate #12	12	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
13	Sample	Method Blank	13	Blank	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
14	Sample	Wipe Plate #13	FieldBlank	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
15	Sample	LCS-Soil Redo	15	Lot # 9201	1.000	1.000	1.000	1.000	0.250	0.127	0.000	100.000
16	Sample	Wipe Plate #1	16	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
17	Sample	Wipe Plate #2	17	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
18	Sample	Wipe Plate #3	18	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
19	Sample	Wipe Plate #4	19	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
20	Sample	Wipe Plate #5	20	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
21	Sample	Wipe Plate #6	21	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
22	Sample	Wipe Plate #7	22	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
23	Sample	Wipe Plate #8	23	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
24	Sample	Wipe Plate #9	24	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
25	Sample	Wipe Plate #10	25	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
26	Sample	Wipe Plate #11	26	PCB-Wipe S	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
27	Sample	1242-50	27	ccv	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000
28	Sample	Method Blank	28	Blank	1.000	1.000	1.000	1.000	1.000	1.000	0.000	100.000

Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw File	Cal Rpt	Level Name	Sequence Process Information - Channel A	
														Update RT	Out Dev
1	A	-	1	1242	1242	1242	1242	W25P001	W25P001		W25P001	-	-	-	DEFAULT,DE
2	A	-	2	1242	1242	1242	1242	W25P002	W25P002		W25P002	-	-	-	DEFAULT,DE
3	A	-	3	1242	1242	1242	1242	W25P003	W25P003		W25P003	-	-	-	DEFAULT,DE
4	A	-	4	1242	1242	1242	1242	W25P004	W25P004		W25P004	-	-	-	DEFAULT,DE
5	A	-	5	1242	1242	1242	1242	W25P005	W25P005		W25P005	-	-	-	DEFAULT,DE
6	A	-	6	1242	1242	1242	1242	W25P006	W25P006		W25P006	-	-	-	DEFAULT,DE
7	A	-	7	1242	1242	1242	1242	W25P007	W25P007		W25P007	-	-	-	DEFAULT,DE
8	A	-	8	1242	1242	1242	1242	W25P008	W25P008		W25P008	-	-	-	DEFAULT,DE
9	A	-	9	1242	1242	1242	1242	W25P009	W25P009		W25P009	-	-	-	DEFAULT,DE
10	A	-	10	1242	1242	1242	1242	W25P010	W25P010		W25P010	-	-	-	DEFAULT,DE
11	A	-	11	1242	1242	1242	1242	W25P011	W25P011		W25P011	-	-	-	DEFAULT,DE
12	A	-	12	1242	1242	1242	1242	W25P012	W25P012		W25P012	-	-	-	DEFAULT,DE
13	A	-	13	1242	1242	1242	1242	W25P013	W25P013		W25P013	-	-	-	DEFAULT,DE
14	A	-	14	1242	1242	1242	1242	W25P014	W25P014		W25P014	-	-	-	DEFAULT,DE
15	A	-	15	1242	1242	1242	1242	W25P015	W25P015		W25P015	-	-	-	DEFAULT,DE
16	A	-	16	1242	1242	1242	1242	W25P016	W25P016		W25P016	-	-	-	DEFAULT,DE
17	A	-	17	1242	1242	1242	1242	W25P017	W25P017		W25P017	-	-	-	DEFAULT,DE
18	A	-	18	1242	1242	1242	1242	W25P018	W25P018		W25P018	-	-	-	DEFAULT,DE
19	A	-	19	1242	1242	1242	1242	W25P019	W25P019		W25P019	-	-	-	DEFAULT,DE
20	A	-	20	1242	1242	1242	1242	W25P020	W25P020		W25P020	-	-	-	DEFAULT,DE
21	A	-	21	1242	1242	1242	1242	W25P021	W25P021		W25P021	-	-	-	DEFAULT,DE
22	A	-	22	1242	1242	1242	1242	W25P022	W25P022		W25P022	-	-	-	DEFAULT,DE
23	A	-	23	1242	1242	1242	1242	W25P023	W25P023		W25P023	-	-	-	DEFAULT,DE
24	A	-	24	1242	1242	1242	1242	W25P024	W25P024		W25P024	-	-	-	DEFAULT,DE
25	A	-	25	1242	1242	1242	1242	W25P025	W25P025		W25P025	-	-	-	DEFAULT,DE

26	A	-	26	1242	1242	1242	1242	W25P026	W25P026	W25P026	-	-	-	DEFAULT,DE
27	A	-	27	1242	1242	1242	1242	W25P027	W25P027	W25P027	-	-	-	DEFAULT,DE
28	A	-	28	1242	1242	1242	1242	W25P028	W25P028	W25P028	-	-	-	DEFAULT,DE

Software Version: 4.1<2F12>
Sample Name : Wipe Plate #12
Sample Number: 12
Dilutor : LVT

Time : 5/25/00 10:07 PM
Study : PCB-Wipe Study

Instrument : AUTOSYS_-_0:A Channel : A A/D mV Range : 1000
AutoSampler : BUILT-IN
Rack/Vial : 0/12

Interface Serial # : NONE Data Acquisition Time: 5/25/00 09:32 PM
Delay Time : 0.00 min.
End Time : 35.00 min.
Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P012A.RAW
Result File : C:\TC4\LEO\W25P012A.RST
Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P012A.RST
Proc Method : C:\TC4\DATA2\1242
Cal Method : C:\TC4\DATA2\1242
Sequence File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Pe	Time	Area	BL	Component	Raw	Adjusted
#	[min]	{ μ V·s}		Name	Amount	Amount
	6.929	60100595.85	Peaks		1167.6233	1167.6233
59	22.706	1393428.37	BB Surrogate		0.0290	0.0290
		61494024.21			1167.6523	1167.6523

Group Report For : Peaks

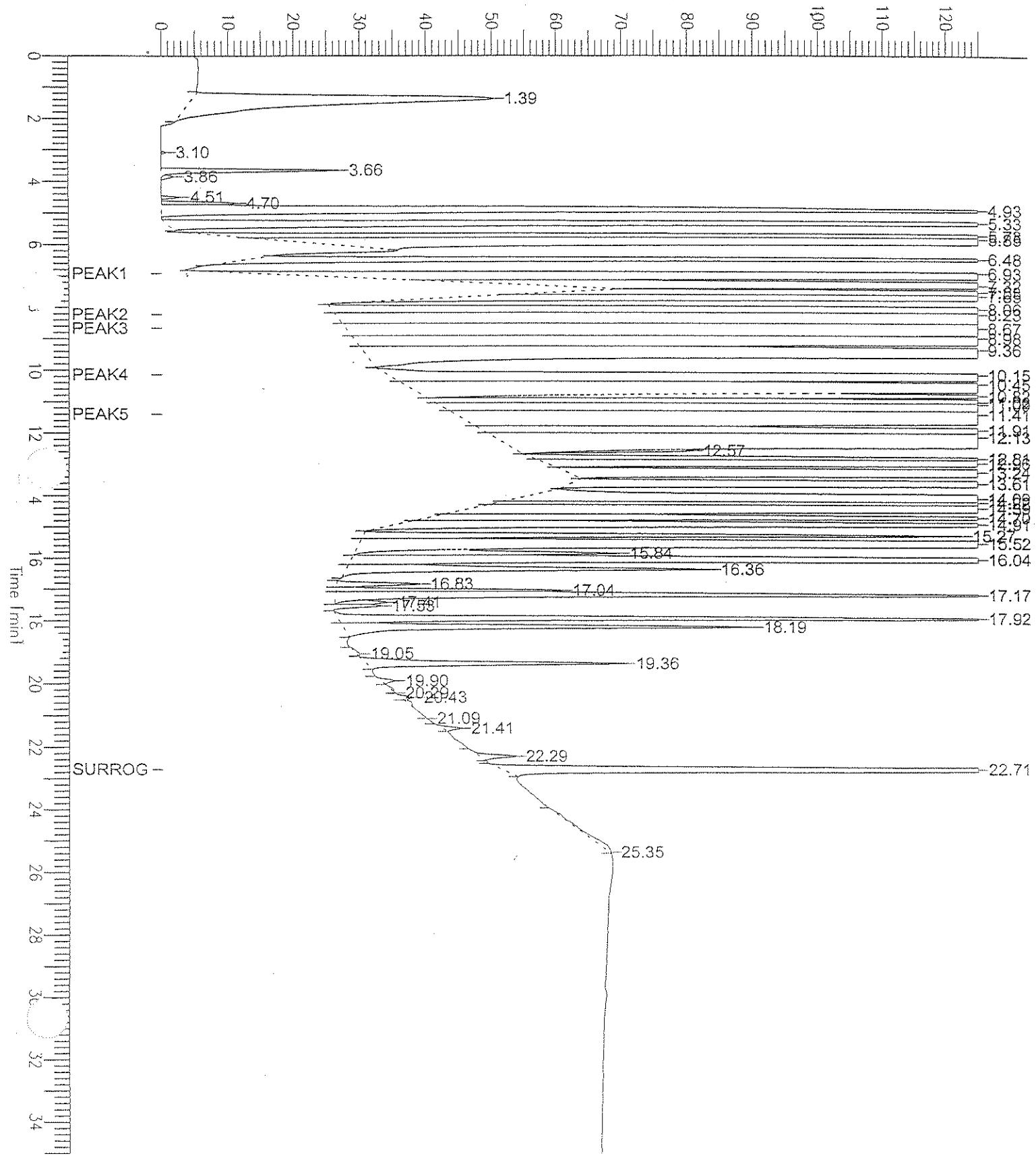
Peak	Time	Area	BL	Component	Raw	Adjusted
#	[min]	{ μ V·s}		Name	Amount	Amount
12	6.929	9507939.24	BV	Peak1	1313.4900	1313.4900
17	8.234	12606351.86	VV	Peak2	809.9750	809.9750
18	8.674	12208847.30	VV	Peak3	1631.4056	1631.4056
21	10.154	10357076.46	BV	Peak4	1351.5434	1351.5434
26	11.408	15420380.99	VV	Peak5	1140.2872	1140.2872
		60100595.85			6246.7011	6246.7011

Chromatogram

Sample Name : Wipe Plate #12
FileName : C:\TC4\LEO\W25P012A.raw
Inj. Vol. : 1242
Time : 0.00 min End Time : 35.00 min
Plot Offset: 0 mV

Sample #: 12
Page 1 of 1
Date : 5/25/00 10:07 PM
Time of Injection: 5/25/00 09:32 PM
Low Point : 0.00 mV High Point : 125.00 mV
Plot Scale: 125.0 mV

Response [mV]



Software Version: 4.1<2F12>
 Sample Name : Method Blank
 Sample Number: 13
 Operator : LVT
 Instrument : AUTOSYS_-_-0:A Channel : A A/D mV Range : 1000
 AutoSampler : BUILT-IN
 Stack/Vial : 0/13
 Interface Serial # : NONE Data Acquisition Time: 5/25/00 10:11 PM
 Delay Time : 0.00 min.
 End Time : 35.00 min.
 Sampling Rate : 6.2500 pts/sec
 Raw Data File : C:\TC4\LEO\W25P013.RAW
 Result File : C:\TC4\LEO\W25P013.RST
 Next Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P013.RST
 Proc Method : C:\TC4\DATA2\1242
 % b Method : C:\TC4\DATA2\1242
 Sequence File : C:\TC4\LEO\MAYPE.SEQ
 Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
 Sample Amount : 1.0000 Dilution Factor : 1.00

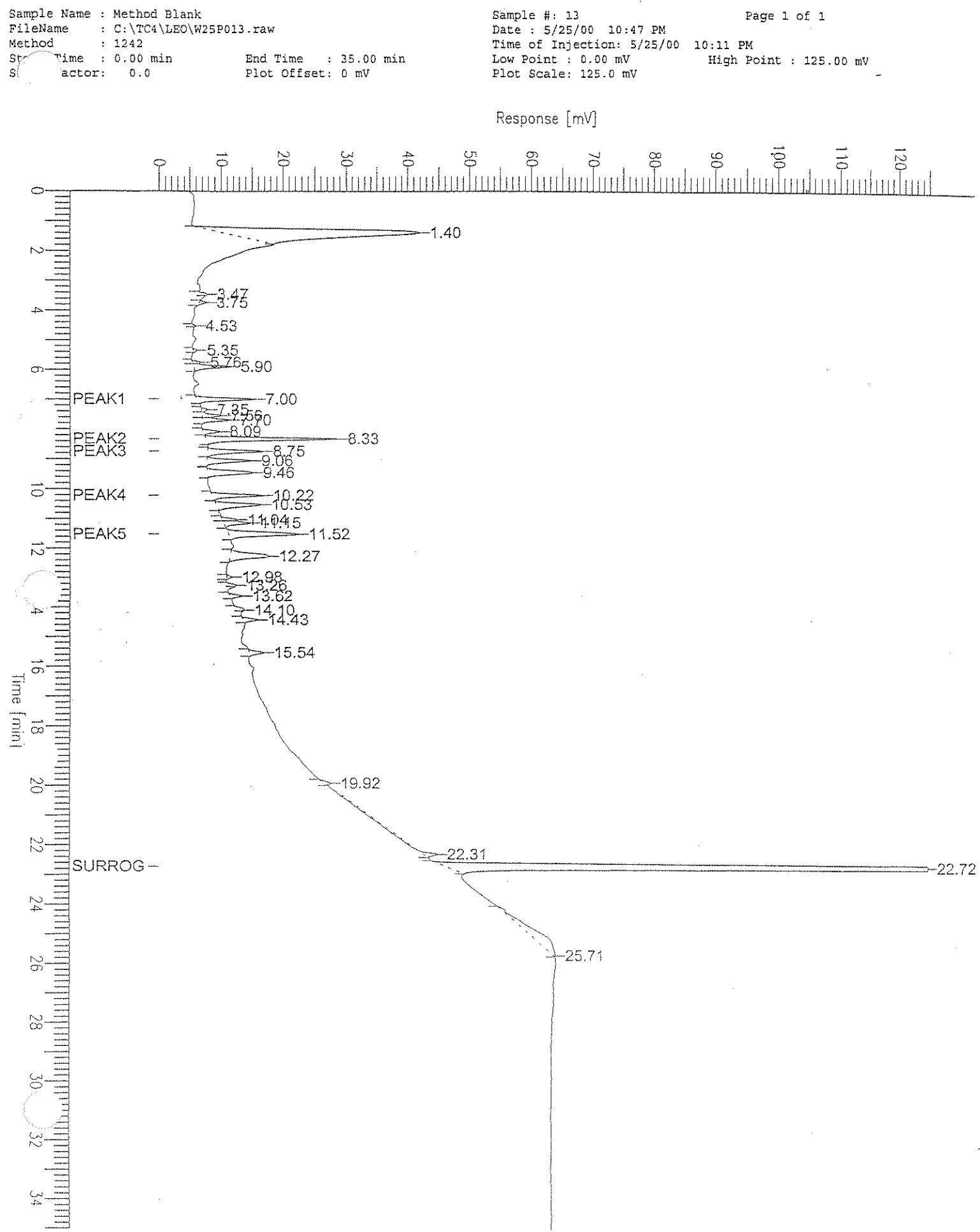
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
31	8.332	421849.14	Peaks		8.1956	8.1956
	22.719	1846064.93	BB Surrogate		0.0385	0.0385
		2267914.08			8.2341	8.2341

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
6	6.999	58622.51	BB Peak1		8.0985	8.0985
13	8.332	140445.36	BB Peak2		9.0238	9.0238
14	8.746	64514.03	BV Peak3		8.6207	8.6207
17	10.222	55515.90	BB Peak4		7.2445	7.2445
21	11.524	102751.35	BV Peak5		7.5981	7.5981
		421849.14			40.5856	40.5856

Chromatogram



Software Version: 4.1<2F12>
Sample Name : Wipe Plate #13 Time : 5/25/00 11:26 PM
Sample Number: FieldBlank Study : PCB-Wipe Study
P Factor : LVT

Instrument : AUTOSYS --_0:A Channel : A A/D mV Range : 1000
AutoSampler : BUILT-IN
Rack/Vial : 0/14

Interface Serial # : NONE Data Acquisition Time: 5/25/00 10:50 PM
Delay Time : 0.00 min.
End Time : 35.00 min.
Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P014.RAW
Result File : C:\TC4\LEO\W25P014.RST
Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P014.RST
Proc Method : C:\TC4\DATA2\1242
Cal Method : C:\TC4\DATA2\1242
Sequence File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

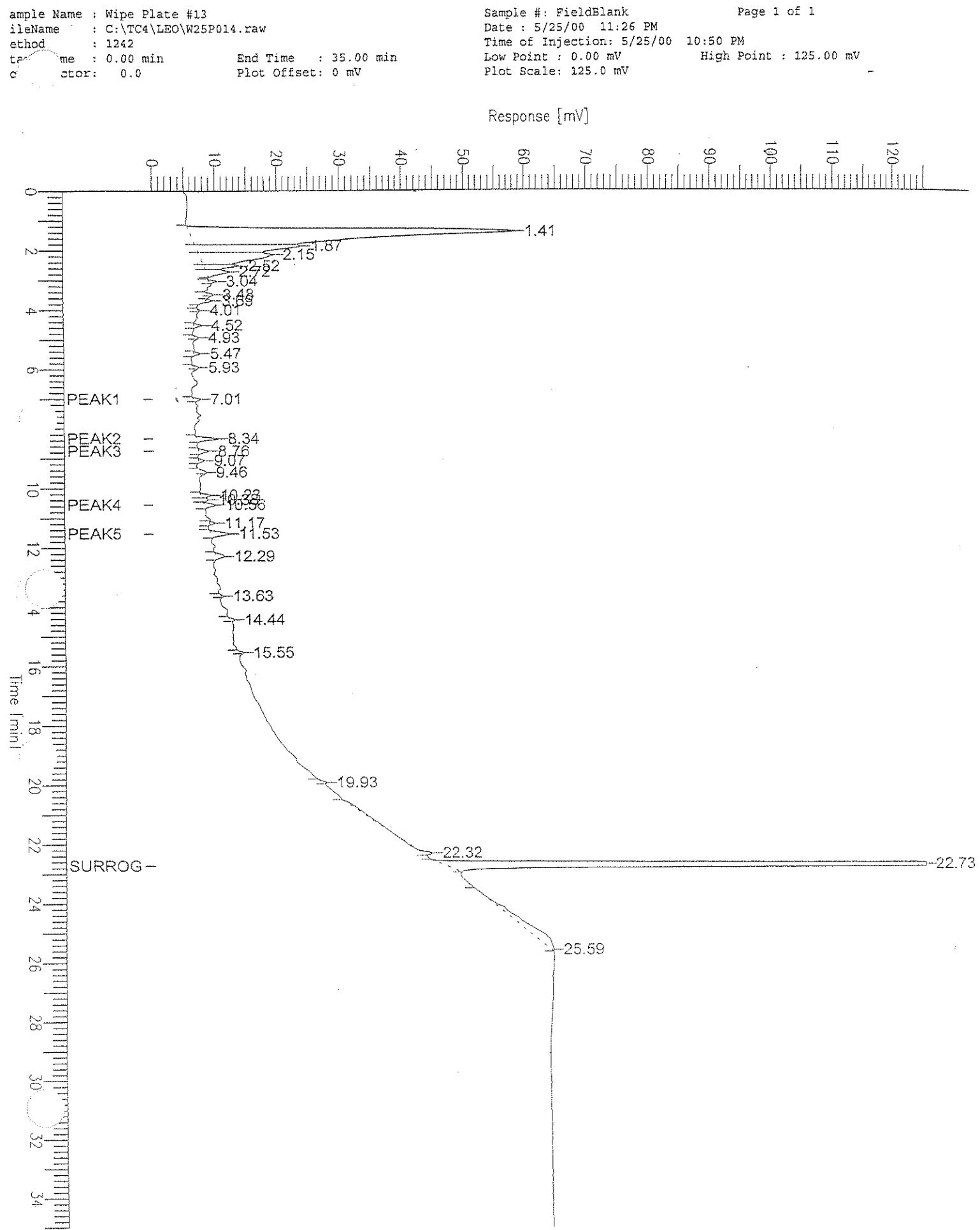
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
	8.340	74455.90	Peaks		1.4465	1.4465
30	22.727	1479797.40	BB Surrogate		0.0308	0.0308
		1554253.30			1.4774	1.4774

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
14	7.014	5267.73	BB Peak1		0.7277	0.7277
15	8.340	20930.55	BB Peak2		1.3448	1.3448
16	8.757	9928.34	BB Peak3		1.3267	1.3267
21	10.555	13571.62	VB Peak4		1.7710	1.7710
23	11.531	24757.65	BB Peak5		1.8307	1.8307
		74455.90			7.0010	7.0010

Chromatogram



Software Version: 4.1<2F12>
Sample Name : LCS-Soil Redo Time : 5/26/00 12:05 AM
Sample Number: 15 Study : Lot # 9202
Monitor : LVT

Instrument : AUTOSYS_-_0:A Channel : A A/D mV Range : 1000
AutoSampler : BUILT-IN
Rack/Vial : 0/15

Interface Serial # : NONE Data Acquisition Time: 5/25/00 11:30 PM
Delay Time : 0.00 min.
End Time : 34.99 min.
Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P015.RAW
Result File : C:\TC4\LEO\W25P015.RST
Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P015.RST
Proc Method : C:\TC4\DATA2\1242
Seq Method : C:\TC4\DATA2\1242
Sequence File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

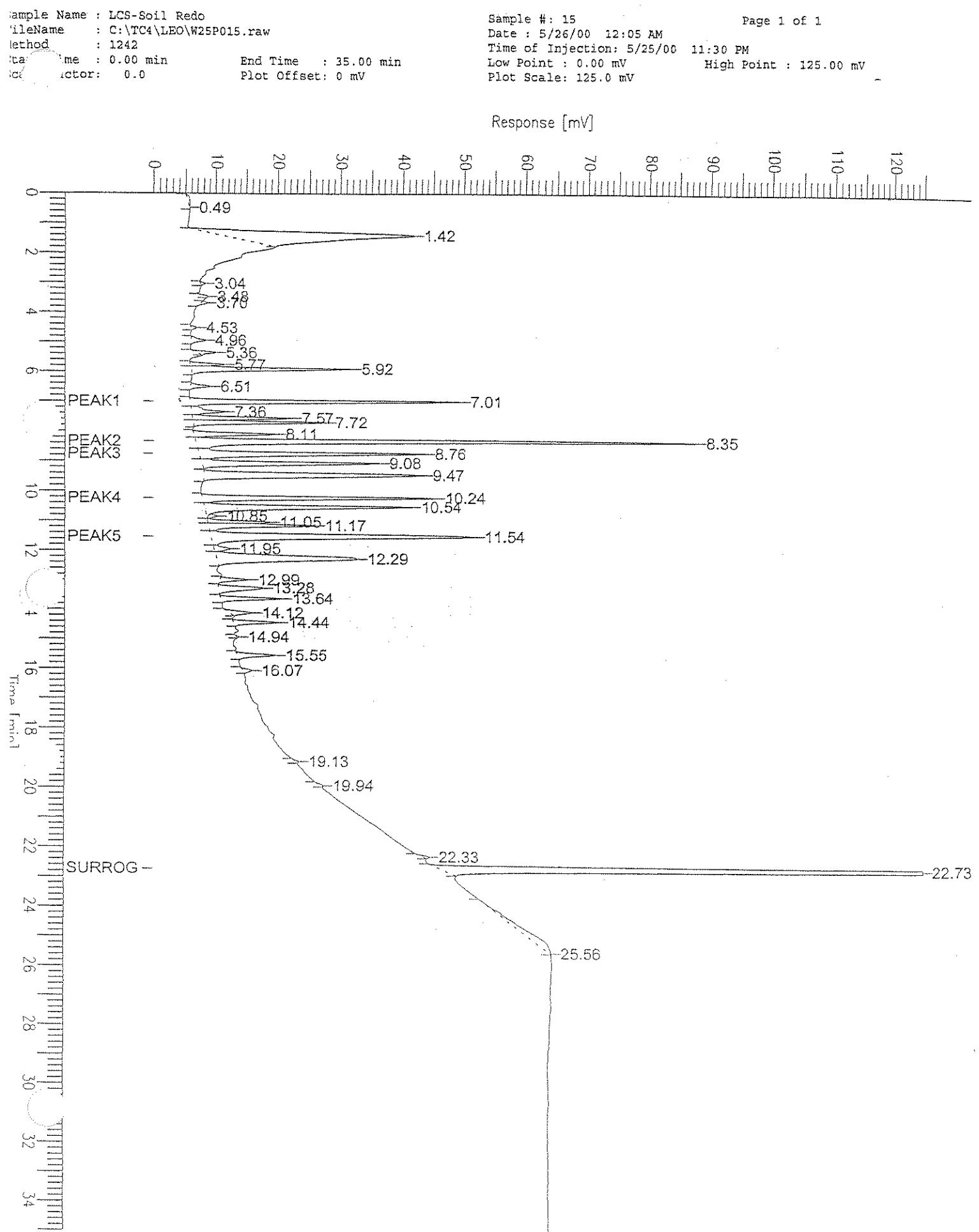
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
	8.345	1807876.51	Peaks		35.1231	69.3037
40	22.731	1233093.52	BB Surrogate		0.0257	0.0507
		3040970.03			35.1488	69.3544

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
12	7.012	276716.27	BV	Peak1	38.2274	75.4290
17	8.345	562968.83	VV	Peak2	36.1715	71.3723
18	8.759	278900.53	VV	Peak3	37.2680	73.5360
21	10.237	261662.83	BV	Peak4	34.1456	67.3749
26	11.535	427628.05	VV	Peak5	31.6217	62.3948
		1807876.51			177.4343	350.1071

Chromatogram



Software Version: 4.1<2F12>
Sample Name : Wipe Plate #1 Time : 5/26/00 12:44 AM
Sample Number: 16 Study : PCB-Wipe Study
Operator : LVT

Instrument : AUTOSYS_-_0:A Channel : A A/D mV Range : 1000
AutoSampler : BUILT-IN
Vial : 0/16

Interface Serial # : NONE Data Acquisition Time: 5/26/00 12:09 AM
Delay Time : 0.00 min.
End Time : 35.00 min.
Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P016.RAW
Result File : C:\TC4\LEO\W25P016.RST
Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P016.RST
Proc Method : C:\TC4\DATA2\1242
Cal Method : C:\TC4\DATA2\1242
Sequence File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

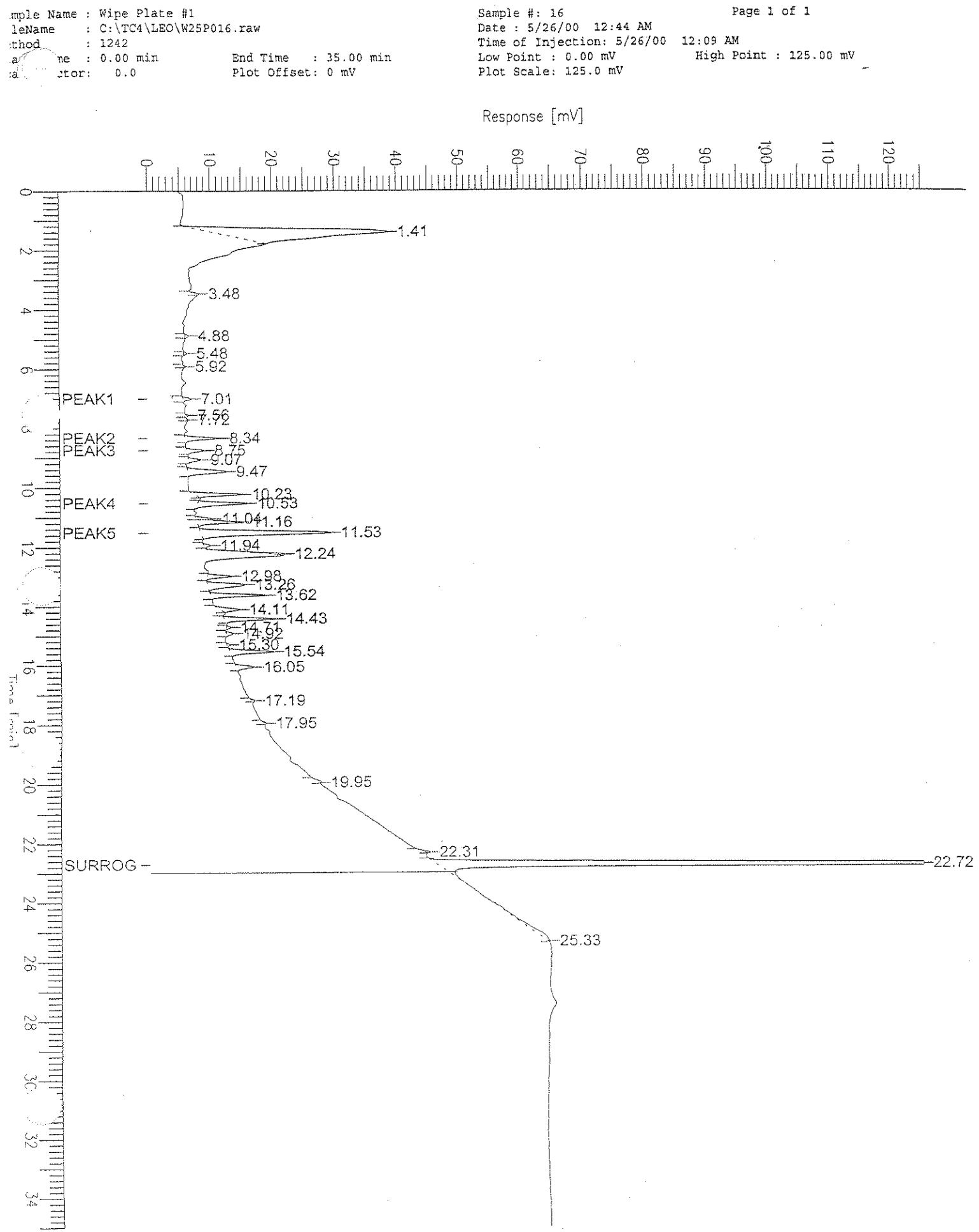
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
11.525	318330.62	Peaks			6.1845	6.1845
34.22.720	1209396.04	BV Surrogate			0.0252	0.0252
	1527726.66				6.2097	6.2097

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
6	7.010	7959.43	BB Peak1		1.0996	1.0996
9	8.341	34785.87	BB Peak2		2.2350	2.2350
10	8.754	19194.36	BB Peak3		2.5648	2.5648
14	10.529	58105.40	BB Peak4		7.5824	7.5824
17	11.525	198285.57	BB Peak5		14.6626	14.6626
	318330.62				28.1445	28.1445

Chromatogram



Software Version: 4.1<2F12>
 Sample Name : Wipe Plate #2
 Sample Number: 17
 Operator : LVT
 Instrument : AUTOSYS_-_0:A Channel : A A/D mV Range : 1000
 AutoSampler : BUILT-IN
 Rack/Vial : 0/17
 Interface Serial # : NONE Data Acquisition Time: 5/26/00 12:48 AM
 Delay Time : 0.00 min.
 End Time : 35.00 min.
 Sampling Rate : 6.2500 pts/sec
 Raw Data File : C:\TC4\LEO\W25P017.RAW
 Result File : C:\TC4\LEO\W25P017.RST
 Reference Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P017.RST
 Proc Method : C:\TC4\DATA2\1242
 Z Method : C:\TC4\DATA2\1242
 Sequence File : C:\TC4\LEO\MAYPE.SEQ
 Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
 Sample Amount : 1.0000 Dilution Factor : 1.00

1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
25	11.528	103606.61	Peaks		2.0129	2.0129
	22.733	1275554.04	BB Surrogate		0.0266	0.0266
		1379160.65			2.0394	2.0394

Group Report For : Peaks

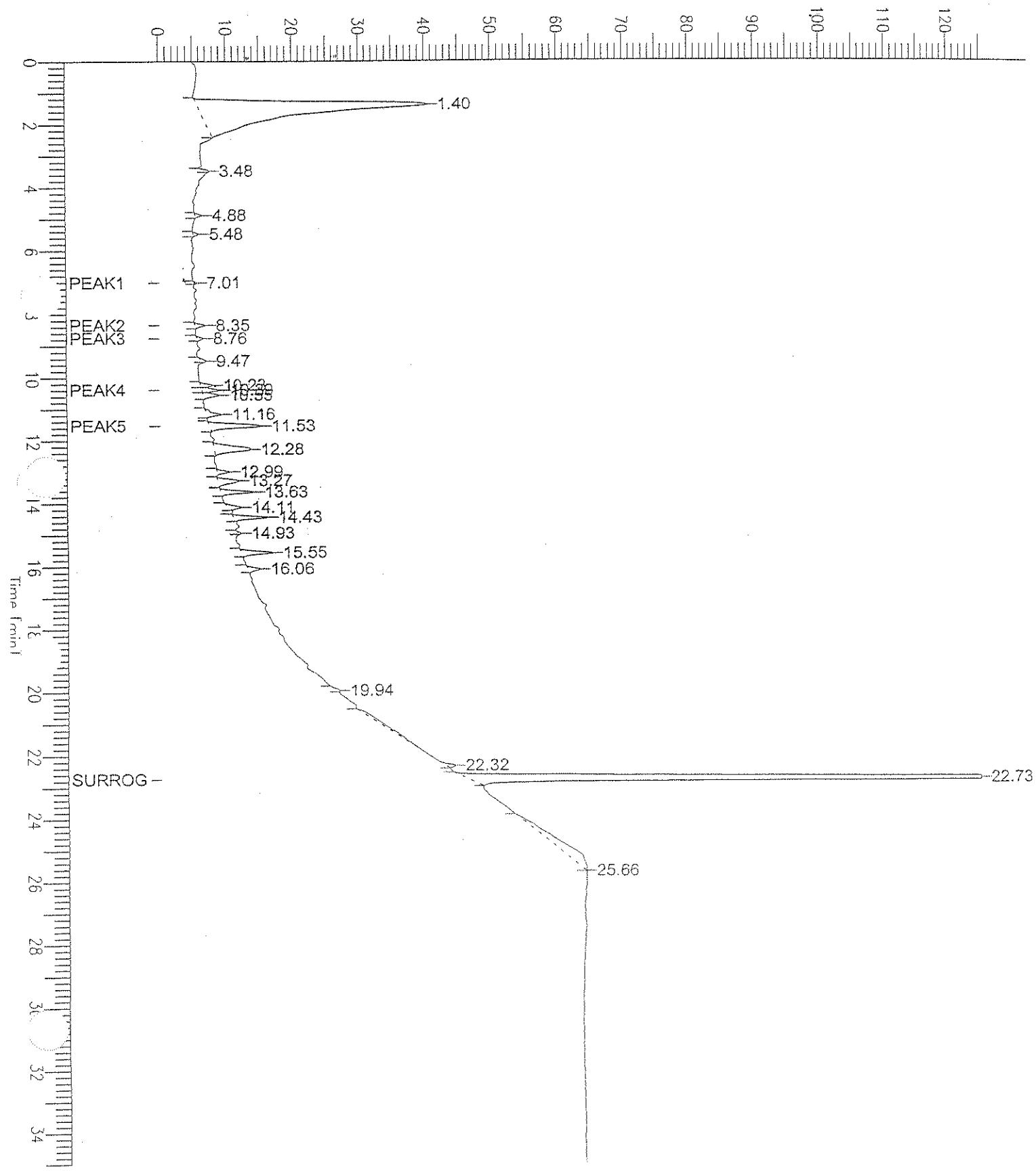
Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
5	7.010	1361.65	BB Peak1		0.1881	0.1881
6	8.346	9296.78	BB Peak2		0.5973	0.5973
7	8.760	4795.53	BB Peak3		0.6408	0.6408
10	10.386	16910.65	VV Peak4		2.2068	2.2068
13	11.528	71241.79	BB Peak5		5.2681	5.2681
		103606.61			8.9011	8.9011

Chromatogram

Sample Name : Wipe Plate #2
File Name : C:\TC4\LEO\W25P017.raw
Batch : 1242
Time : 0.00 min End Time : 35.00 min
Plot Offset: 0 mV

Sample #: 17 Page 1 of 1
Date : 5/26/00 01:24 AM
Time of Injection: 5/26/00 12:48 AM
Low Point : 0.00 mV High Point : 125.00 mV
Plot Scale: 125.0 mV

Response [mV]



Software Version: 4.1<2F12>

Sample Name : Wipe Plate #3

Time : 5/26/00 02:03 AM

Sample Number: 18

Study : PCB-Wipe Study

Operator : LVT

Instrument : AUTOSYS _ _ 0:A

Channel : A

A/D mV Range : 1000

AutoSampler : BUILT-IN

Rack/Vial : 0/18

Interface Serial # : NONE Data Acquisition Time: 5/26/00 01:28 AM

Delay Time : 0.00 min.

End Time : 35.00 min.

Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P018.RAW

Result File : C:\TC4\LEO\W25P018.RST

Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P018.RST

Proc Method : C:\TC4\DATA2\1242

Calib Method : C:\TC4\DATA2\1242

Sequence File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

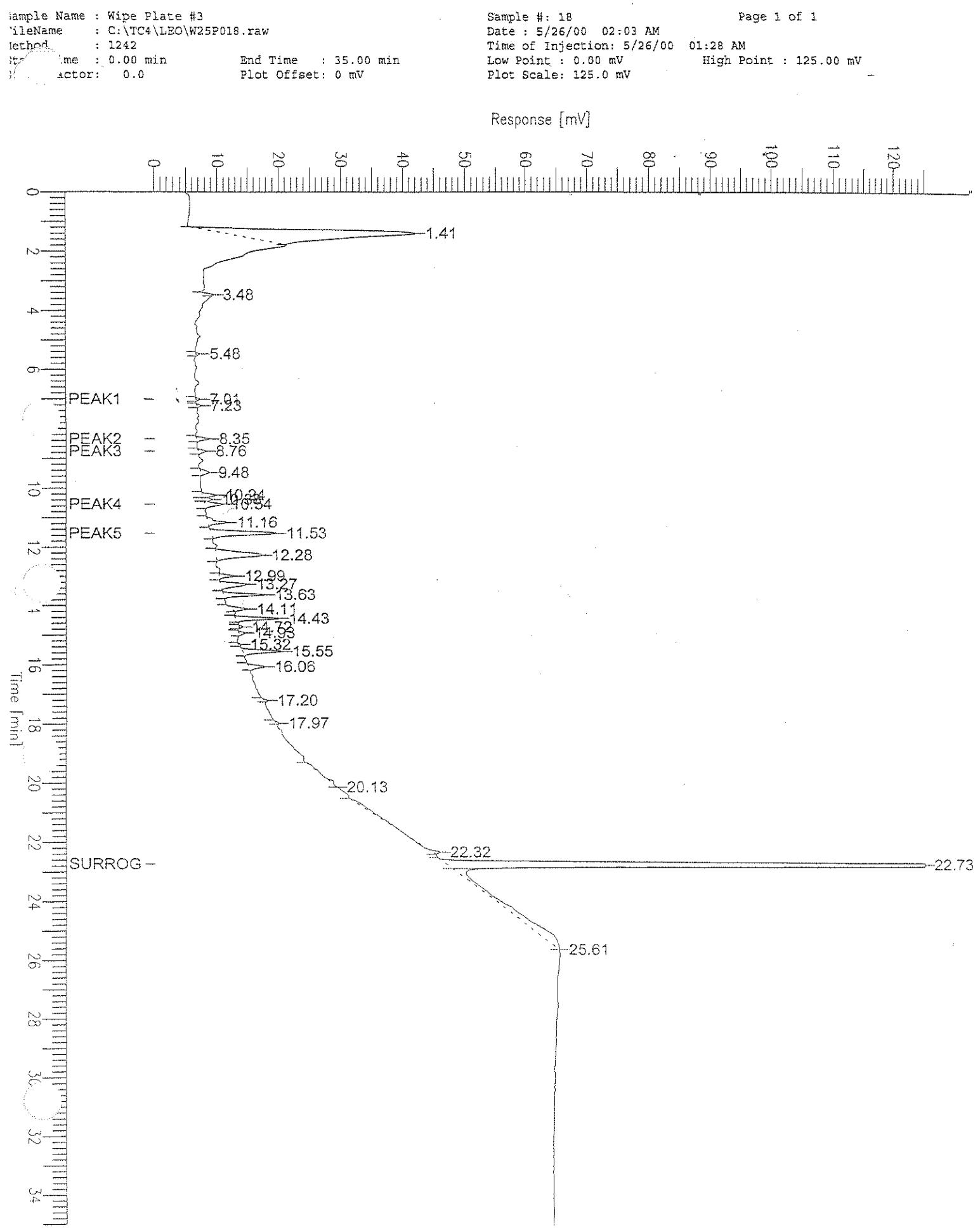
1242 (s=mg/Kg, h₂O=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
	11.529	139987.64	Peaks		2.7197	2.7197
29	22.729	1283123.28	BV Surrogate		0.0267	0.0267
		1423110.92			2.7464	2.7464

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
4	7.010	2877.77	BB Peak1		0.3976	0.3976
6	8.347	11905.97	BB Peak2		0.7650	0.7650
7	8.762	6820.45	BB Peak3		0.9114	0.9114
11	10.543	20675.35	VB Peak4		2.6980	2.6980
13	11.529	97708.09	BB Peak5		7.2252	7.2252
		139987.64			11.9971	11.9971

Chromatogram



Software Version: 4.1<2F12>
Sample Name : Wipe Plate #4 Time : 6/1/00 07:53 AM
Sample Number: 19 Study : PCB-Wipe Study
Operator : LVT

Instrument : AUTOSYS_-_0:A Channel : A A/D mV Range : 1000
AutoSampler : BUILT-IN
Ack/Vial : 0/19

Interface Serial # : NONE Data Acquisition Time: 5/26/00 02:07 AM
Delay Time : 0.00 min.
End Time : 34.99 min.
Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P019.RAW
Result File : C:\TC4\LEO\W25P019.RST
Method File : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P019.RST
PROC Method : C:\TC4\DATA2\1242.mth
Sequence File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
	11.531	173623.88	Peaks		3.3731	3.3731
		173623.88			3.3731	3.3731

Group Report For : Peaks

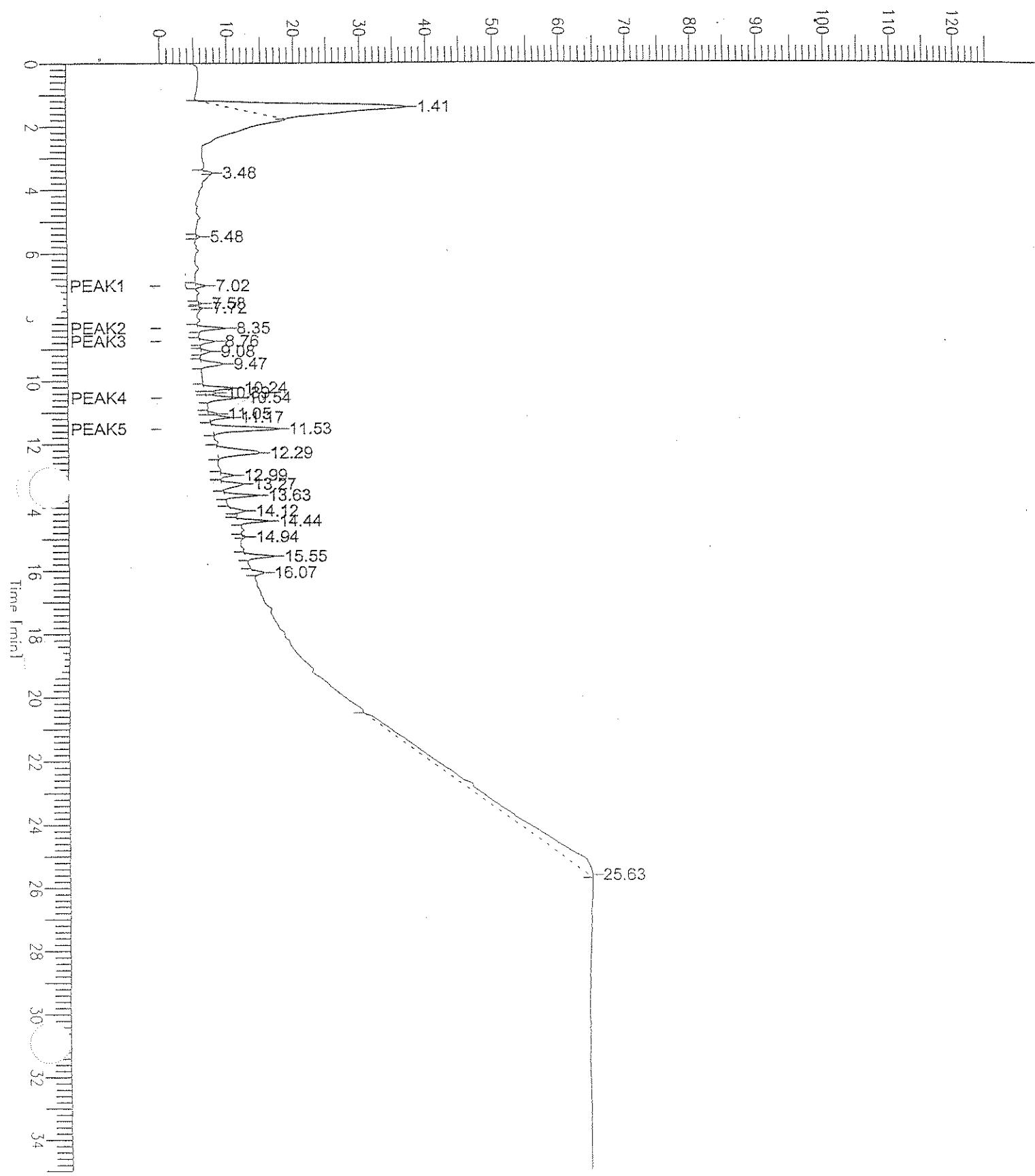
Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
4	7.017	7939.11	BB	Peak1	1.0968	1.0968
7	8.350	25606.58	BB	Peak2	1.6453	1.6453
8	8.763	14189.40	BB	Peak3	1.8961	1.8961
13	10.544	33893.63	VB	Peak4	4.4229	4.4229
16	11.531	91995.15	BB	Peak5	6.8027	6.8027
		173623.88			15.8638	15.8638

Chromatogram

Sample Name : Wipe Plate #4
File Name : C:\TC4\LEO\W25P019.raw
Method : 1242
Time : 0.00 min End Time : 35.00 min
Plot Offset: 0 mV

Sample #: 19 Page 1 of 1
Date : 5/26/00 02:42 AM
Time of Injection: 5/26/00 02:07 AM
Low Point : 0.00 mV High Point : 125.00 mV
Plot Scale: 125.0 mV

Response [mV]



Software Version: 4.1<2F12>
 Sample Name : Wipe Plate #5 Time : 5/26/00 03:21 AM
 Sample Number: 20 Study : PCB-Wipe Study
 Operator : LVT
 Instrument : AUTOSYS _ _ 0:A Channel : A A/D mV Range : 1000
 AutoSampler : BUILT-IN
 Rack/Vial : 0/20
 Interface Serial # : NONE Data Acquisition Time: 5/26/00 02:46 AM
 Delay Time : 0.00 min.
 End Time : 35.00 min.
 Sampling Rate : 6.2500 pts/sec
 Raw Data File : C:\TC4\LEO\W25P020.RAW
 Result File : C:\TC4\LEO\W25P020.RST
 Test Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P020.RST
 Proc Method : C:\TC4\DATA2\1242
 'a' Method : C:\TC4\DATA2\1242
 Sequence File : C:\TC4\LEO\MAYPE.SEQ
 Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
 Sample Amount : 1.0000 Dilution Factor : 1.00

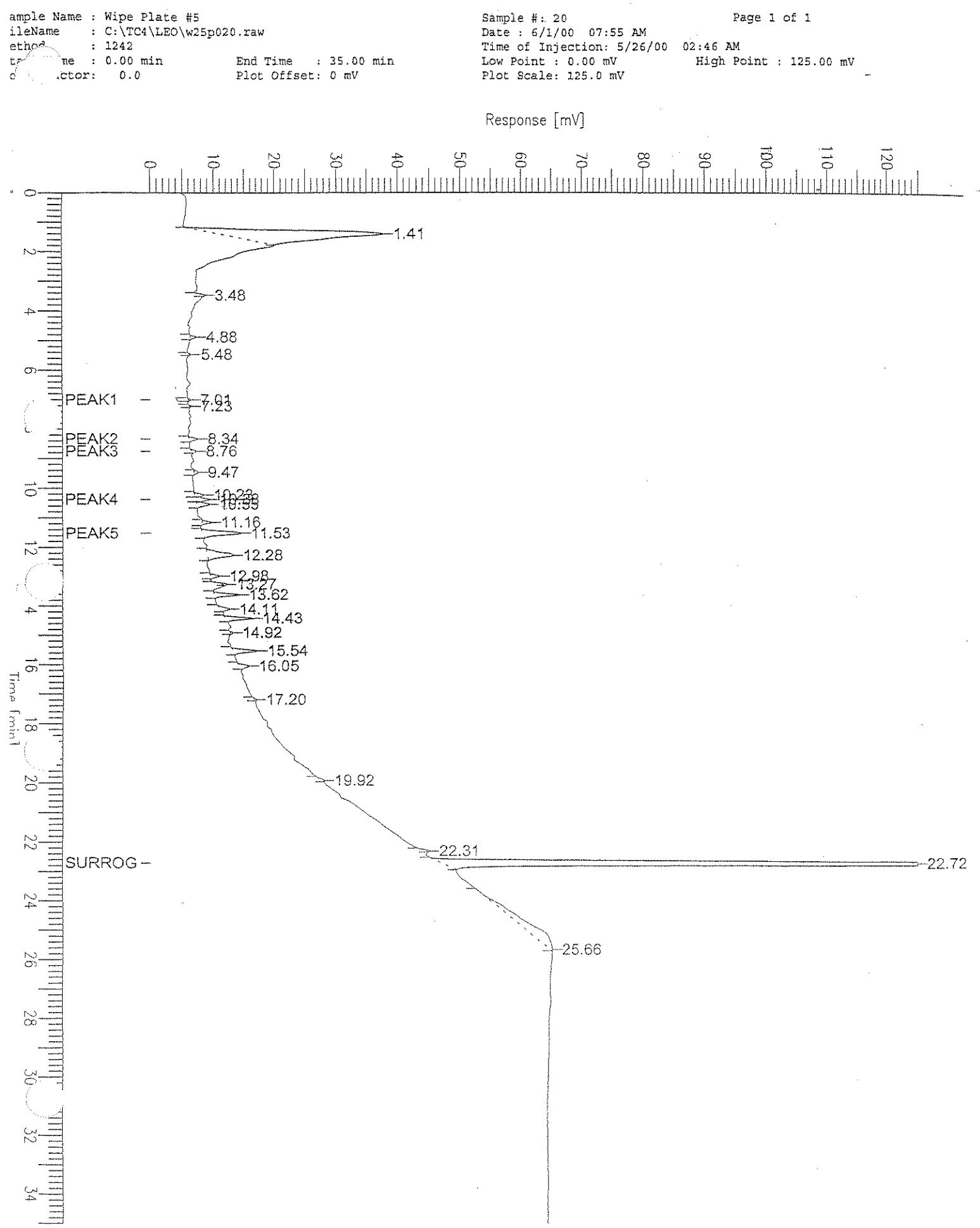
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
11.527	84177.64			Peaks	1.6354	1.6354
27 22.715	1267257.22			BB Surrogate	0.0264	0.0264
	1351434.86				1.6618	1.6618

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
5	7.012	1536.97	BB	Peak1	0.2123	0.2123
7	8.343	8470.93	BB	Peak2	0.5443	0.5443
8	8.757	3737.79	BB	Peak3	0.4995	0.4995
11	10.383	14461.51	VV	Peak4	1.8872	1.8872
14	11.527	55970.43	BB	Peak5	4.1388	4.1388
	84177.64				7.2820	7.2820

Chromatogram



Software Version: 4.1<2F12>
Sample Name : Wipe Plate #6 Time : 5/26/00 04:01 AM
Sample Number: 21 Study : PCB-Wipe Study
Operator : LVT

Instrument : AUTOSYS_-_0:A Channel : A A/D mV Range : 1000
AutoSampler : BUILT-IN
Rack/Vial : 0/21

Interface Serial # : NONE Data Acquisition Time: 5/26/00 03:25 AM
Delay Time : 0.00 min.
End Time : 35.00 min.
Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P021.RAW
Result File : C:\TC4\LEO\W25P021.RST
Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P021.RST
Proc Method : C:\TC4\DATA2\1242
Cal Method : C:\TC4\DATA2\1242
Sequence File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area (μ V·s)	BL	Component Name	Raw Amount	Adjusted Amount
10.379	50868.01	Peaks			0.9883	0.9883
22.729	119791.81	BV Surrogate			0.0025	0.0025
	170659.82				0.9908	0.9908

Group Report For : Peaks

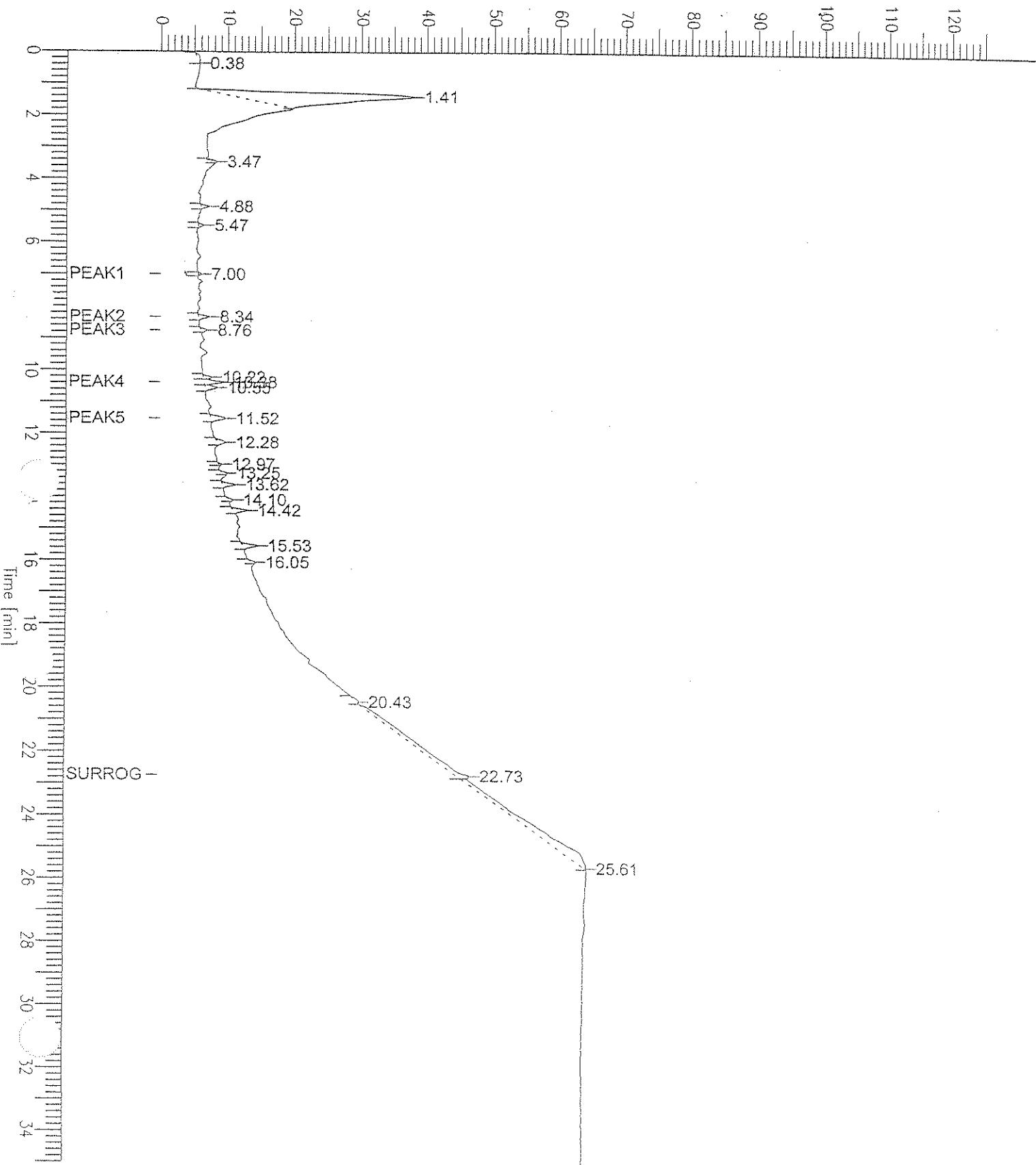
Peak #	Time [min]	Area (μ V·s)	BL	Component Name	Raw Amount	Adjusted Amount
6	6.996	1891.45	BB Peak1		0.2613	0.2613
7	8.337	9433.05	BB Peak2		0.6061	0.6061
8	8.755	4639.31	BB Peak3		0.6199	0.6199
10	10.379	18543.14	VV Peak4		2.4198	2.4198
12	11.521	16361.05	BB Peak5		1.2098	1.2098
		50868.01			5.1169	5.1169

Chromatogram

Sample Name : Wipe Plate #6
FileName : C:\TC4\LEO\W25P021.raw
Method : 1242
Start Time : 0.00 min End Time : 35.00 min
'actor: 0.0 Plot Offset: 0 mV

Sample #: 21 Page 1 of 1
Date : 5/26/00 04:01 AM
Time of Injection: 5/26/00 03:25 AM
Low Point : 0.00 mV High Point : 125.00 mV
Plot Scale: 125.0 mV

Response [mV]



Software Version: 4.1<2F12>
 Sample Name : Wipe Plate #7
 Sample Number: 22
 Printer : LVT
 Instrument : AUTOSYS_-_0:A Channel : A A/D mV Range : 1000
 AutoSampler : BUILT-IN
 Rack/Vial : 0/22
 Interface Serial # : NONE Data Acquisition Time: 5/26/00 04:05 AM
 Delay Time : 0.00 min.
 End Time : 35.00 min.
 Sampling Rate : 6.2500 pts/sec
 Raw Data File : C:\TC4\LEO\W25P022.RAW
 Result File : C:\TC4\LEO\W25P022.RST
 Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P022.RST
 Proc Method : C:\TC4\DATA2\1242
 Scan Method : C:\TC4\DATA2\1242
 Sequence File : C:\TC4\LEO\MAYPE.SEQ
 Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
 Sample Amount : 1.0000 Dilution Factor : 1.00

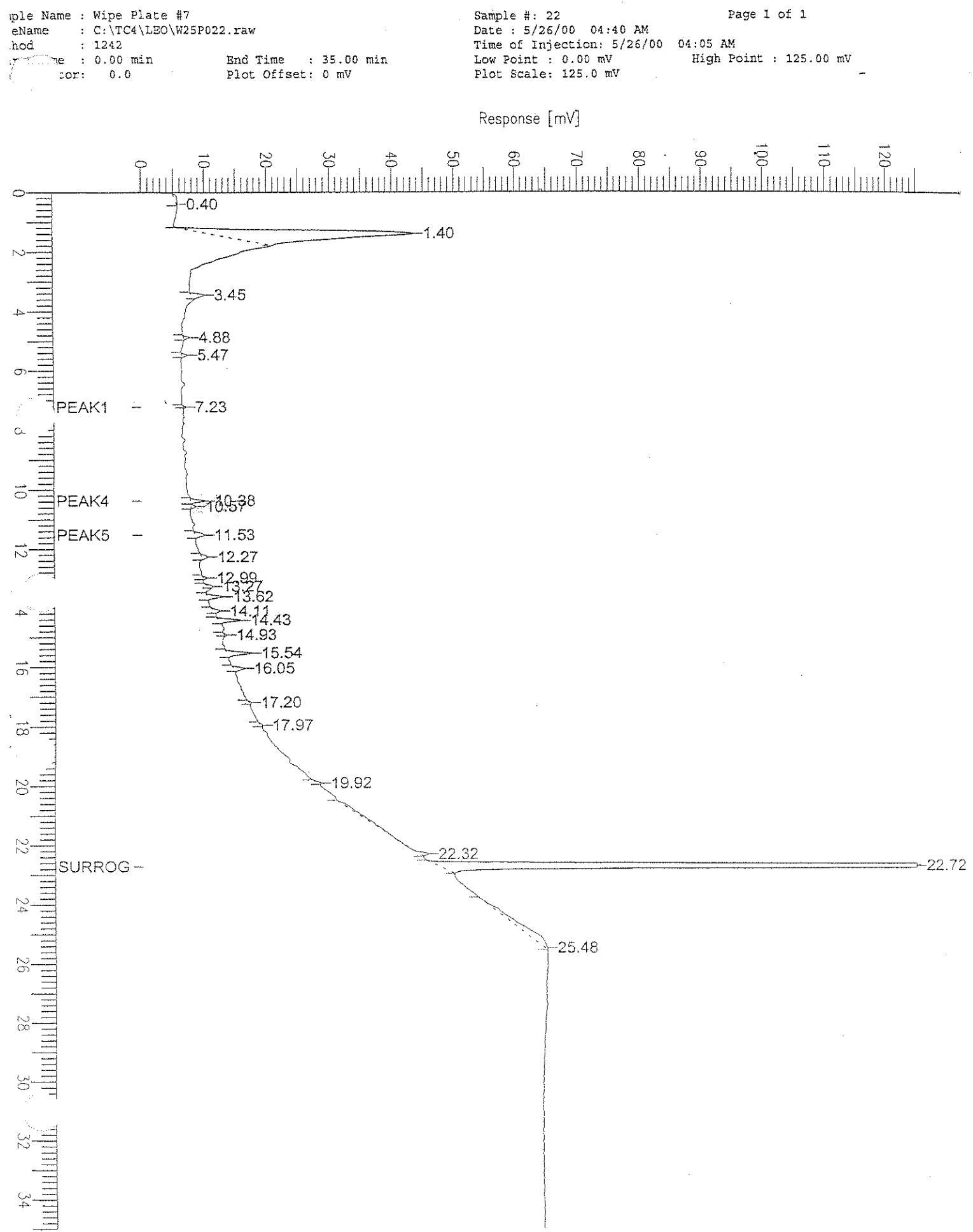
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
10.381	27117.93		Peaks		0.5268	0.5268
22.724	1519876.57		BB Surrogate		0.0317	0.0317
	1546994.50				0.5585	0.5585

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
6	7.229	1242.06	BB	Peak1	0.1716	0.1716
0	8.362	0.00		Peak2	0.0000	0.0000
0	8.779	0.00		Peak3	0.0000	0.0000
7	10.381	13821.47	BV	Peak4	1.8036	1.8036
9	11.529	12054.40	BB	Peak5	0.8914	0.8914
	27117.93				2.8666	2.8666

Chromatogram



Software Version: 4.1<2F12>

Sample Name : Wipe Plate #8

Time : 5/26/00 05:19 AM

Sample Number: 23

Study : PCB-Wipe Study

Operator : LVT

Instrument : AUTOSYS --_0:A

Channel : A A/D mV Range : 1000

AutoSampler : BUILT-IN

Rack/Vial : 0/23

Interface Serial # : NONE Data Acquisition Time: 5/26/00 04:44 AM

Delay Time : 0.00 min.

End Time : 34.99 min.

Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P023.RAW

Result File : C:\TC4\LEO\W25P023.RST

Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P023.RST

Proc Method : C:\TC4\DATA2\1242

Calib Method : C:\TC4\DATA2\1242

Schedule File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

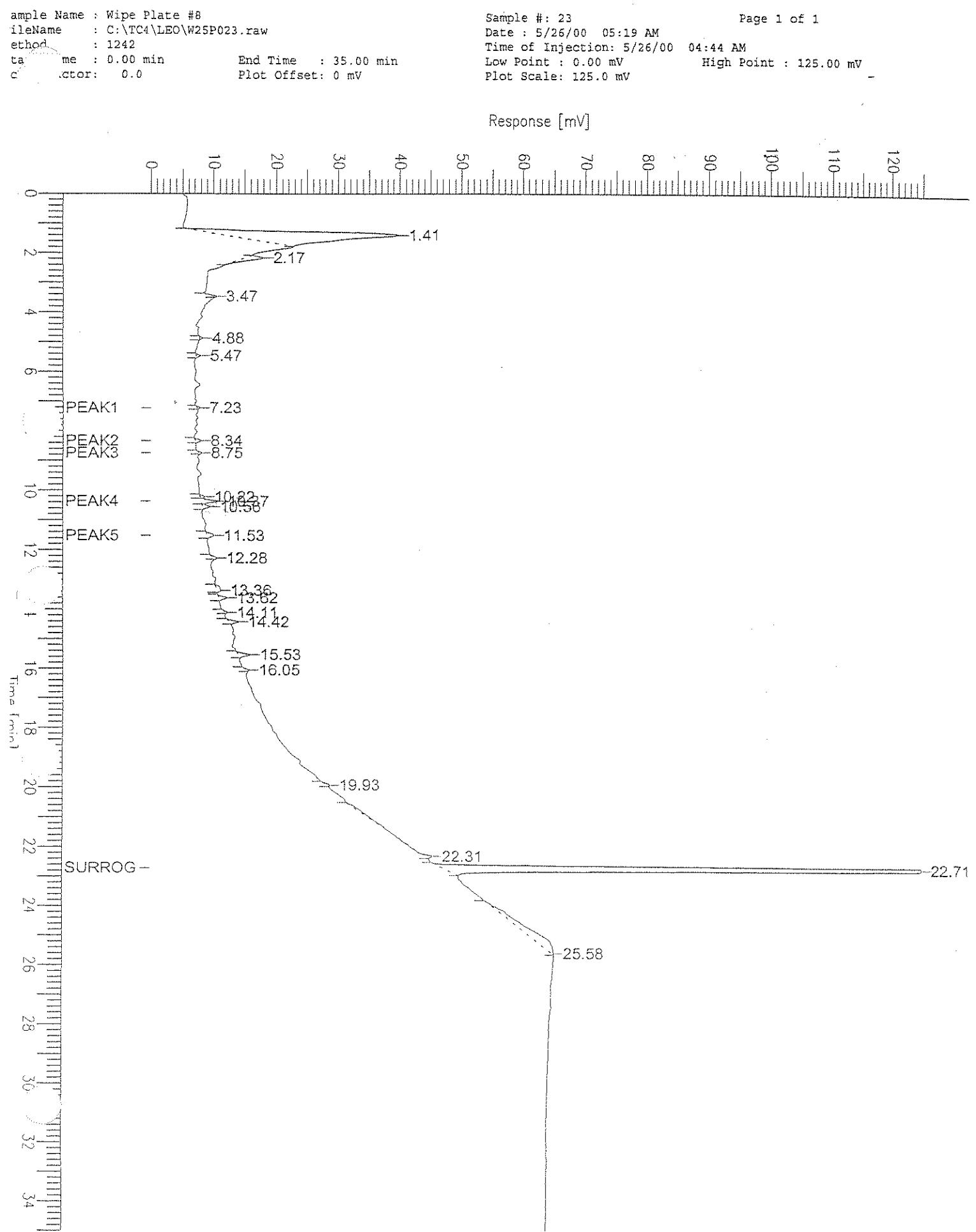
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
10.374		34465.41	Peaks		0.6696	0.6696
22.713		1204221.64	BB Surrogate		0.0251	0.0251
		1238687.05			0.6947	0.6947

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
6	7.227	2158.73	BB Peak1		0.2982	0.2982
7	8.335	4796.51	BB Peak2		0.3082	0.3082
8	8.745	1647.03	BB Peak3		0.2201	0.2201
10	10.374	17446.87	VV Peak4		2.2767	2.2767
12	11.525	8416.27	BB Peak5		0.6224	0.6224
		34465.41			3.7256	3.7256

Chromatogram



Software Version: 4.1<2F12>
 Sample Name : Wipe Plate #9 Time : 5/26/00 05:59 AM
 Sample Number: 24 Study : PCB-Wipe Study
 Operator : LVT
 Instrument : AUTOSYS _ _ 0:A Channel : A A/D mV Range : 1000
 AutoSampler : BUILT-IN
 Rack/Vial : 0/24
 Interface Serial # : NONE Data Acquisition Time: 5/26/00 05:24 AM
 Delay Time : 0.00 min.
 End Time : 35.00 min.
 Sampling Rate : 6.2500 pts/sec
 Raw Data File : C:\TC4\LEO\W25P024.RAW
 Result File : C:\TC4\LEO\W25P024.RST
 Instr Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P024.RST
 Proc Method : C:\TC4\DATA2\1242
 Seq Method : C:\TC4\DATA2\1242
 Sequence File : C:\TC4\LEO\MAYPE.SEQ
 Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
 Sample Amount : 1.0000 Dilution Factor : 1.00

1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
10	10.374	46130.00	Peaks		0.8962	0.8962
19	22.706	1287597.77	BE Surrogate		0.0268	0.0268
		1333727.77			0.9230	0.9230

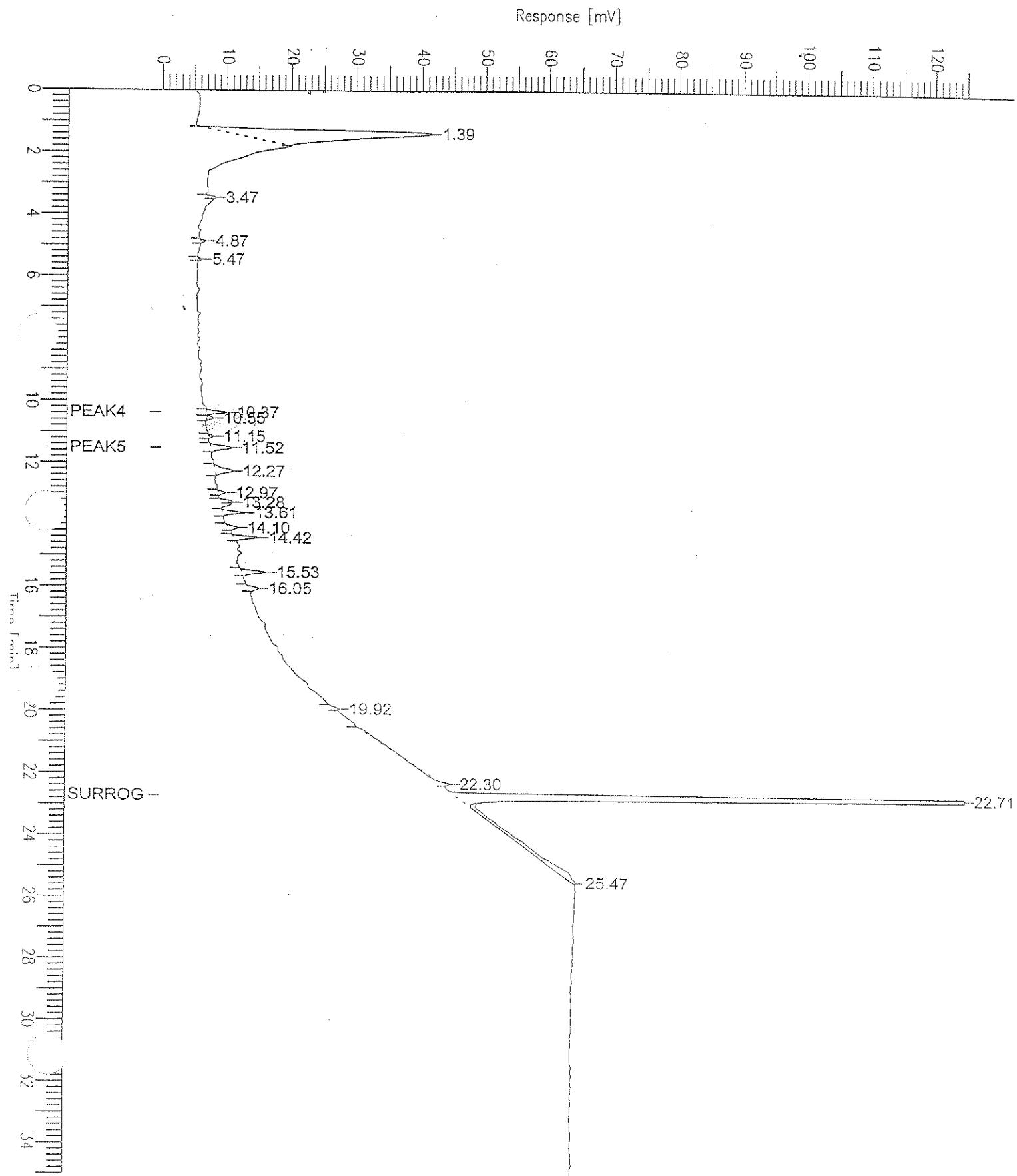
Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
0	7.036	0.00	Peak1		0.0000	0.0000
0	8.362	0.00	Peak2		0.0000	0.0000
0	8.779	0.00	Peak3		0.0000	0.0000
5	10.374	18796.11	BV	Peak4	2.4528	2.4528
8	11.517	27333.89	BB	Peak5	2.0213	2.0213
		46130.00			4.4740	4.4740

Chromatogram

Sample Name : Wipe Plate #9
FileName : C:\TC4\LEO\W25P024.raw
Method : 1242
Start Time : 0.00 min End Time : 35.00 min
Y actor: 0.0 Plot Offset: 0 mV

Sample #: 24 Page 1 of 1
Date : 5/26/00 05:59 AM
Time of Injection: 5/26/00 05:24 AM
Low Point : 0.00 mV High Point : 125.00 mV
Plot Scale: 125.0 mV



Software Version: 4.1<2F12>
 Sample Name : Wipe Plate #10 Time : 5/26/00 06:38 AM
 Sample Number: 25 Study : PCB-Wipe Study
 Operator : LVT
 Instrument : AUTOSYS _ _ 0:A Channel : A A/D mV Range : 1000
 AutoSampler : BUILT-IN
 Stack/Vial : 0/25
 Interface Serial # : NONE Data Acquisition Time: 5/26/00 06:03 AM
 Delay Time : 0.00 min.
 End Time : 35.00 min.
 Sampling Rate : 6.2500 pts/sec
 Raw Data File : C:\TC4\LEO\W25P025.RAW
 Result File : C:\TC4\LEO\W25P025.RST
 Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P025.RST
 Proc Method : C:\TC4\DATA2\1242
 Cap Method : C:\TC4\DATA2\1242
 Sequence File : C:\TC4\LEO\MAYPE.SEQ
 Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
 Sample Amount : 1.0000 Dilution Factor : 1.00

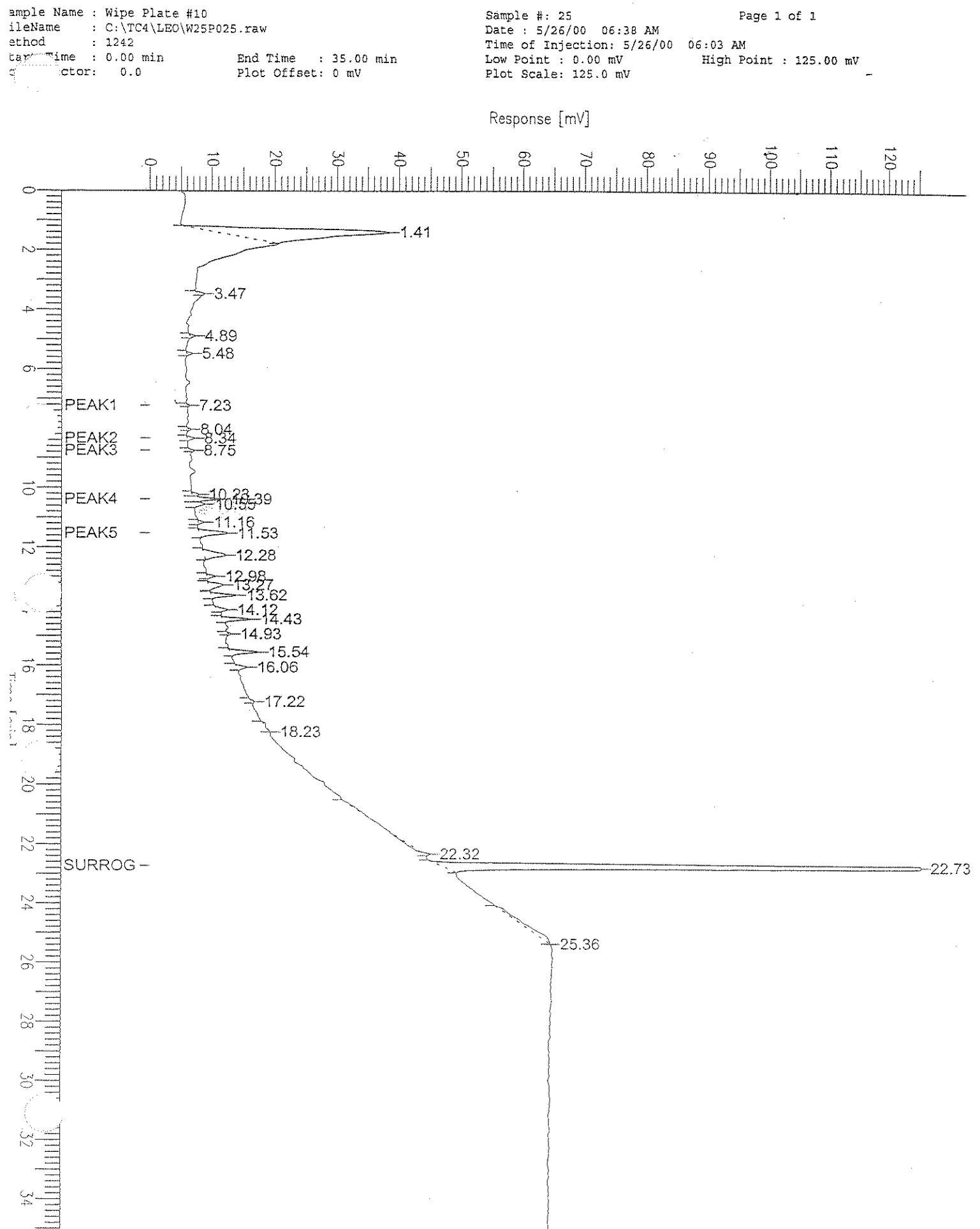
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
	10.386	79159.34	Peaks		1.5379	1.5379
26	22.727	1172995.06	BB Surrogate		0.0244	0.0244
		1252154.40			1.5623	1.5623

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
5	7.232	1329.46	BB Peak1		0.1837	0.1837
7	8.342	6406.60	BB Peak2		0.4116	0.4116
8	8.754	1911.02	BB Peak3		0.2554	0.2554
10	10.386	29046.12	VV Peak4		3.7904	3.7904
13	11.530	40466.14	BB Peak5		2.9923	2.9923
		79159.34			7.6334	7.6334

Chromatogram



Software Version: 4.1<2F12>
Sample Name : Wipe Plate #11
Sample Number: 26
Operator : LVT

Time : 5/26/00 07:18 AM
Study : PCB-Wipe Study

Instrument : AUTOSYS _-_0:A Channel : A A/D mV Range : 1000
AutoSampler : BUILT-IN
Rack/Vial : 0/26

Interface Serial # : NONE Data Acquisition Time: 5/26/00 06:43 AM
Delay Time : 0.00 min.
End Time : 35.00 min.
Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P026.RAW
Result File : C:\TC4\LEO\W25P026.RST
Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P026.RST
Proc Method : C:\TC4\DATA2\1242
Calib Method : C:\TC4\DATA2\1242
Concen File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

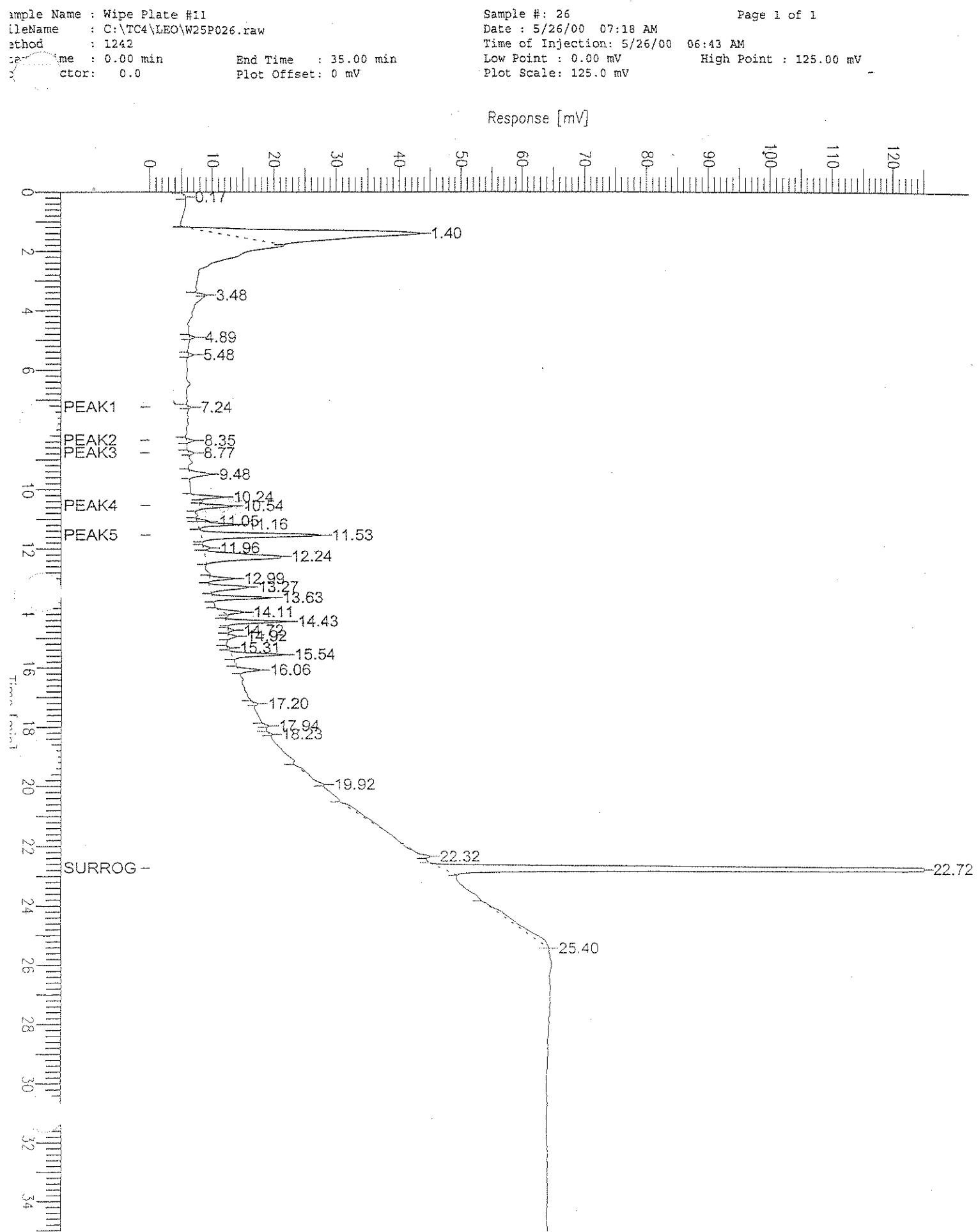
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area {μV·s}	BL	Component Name	Raw Amount	Adjusted Amount
11.532	236187.04		Peaks		4.5886	4.5886
32	22.720	1308686.42	BB Surrogate		0.0273	0.0273
		1544873.46			4.6159	4.6159

Group Report For : Peaks

Peak #	Time [min]	Area {μV·s}	BL	Component Name	Raw Amount	Adjusted Amount
6	7.238	2313.96	BB Peak1		0.3197	0.3197
7	8.351	7580.46	BB Peak2		0.4871	0.4871
8	8.766	3989.31	BB Peak3		0.5331	0.5331
11	10.539	39074.44	BB Peak4		5.0990	5.0990
14	11.532	183228.87	VB Peak5		13.5492	13.5492
		236187.04			19.9880	19.9880

Chromatogram



Software Version: 4.1<2F12>

Sample Name : 1242-50

Time : 6/1/00 07:59 AM

Sample Number: 27

Study : ccv

Operator : LVT

Instrument : AUTOSYS - 0:A Channel : A A/D mV Range : 1000
AutoSampler : BUILT-IN
Rack/Vial : 0/27

Interface Serial # : NONE Data Acquisition Time: 5/26/00 07:22 AM

Delay Time : 0.00 min.

End Time : 34.99 min.

Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P027.RAW

Result File : C:\TC4\LEO\W25P027.RST

Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P027.RST

Proc Method : C:\TC4\DATA2\1242.mth

Calib Method : C:\TC4\DATA2\1242.mth

Sequence File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
	8.336	3706016.62	Peaks		71.9998	71.9998
46	22.715	1712975.76	BB Surrogate		0.0357	0.0357
	5418992.39				72.0355	72.0355

Group Report For : Peaks

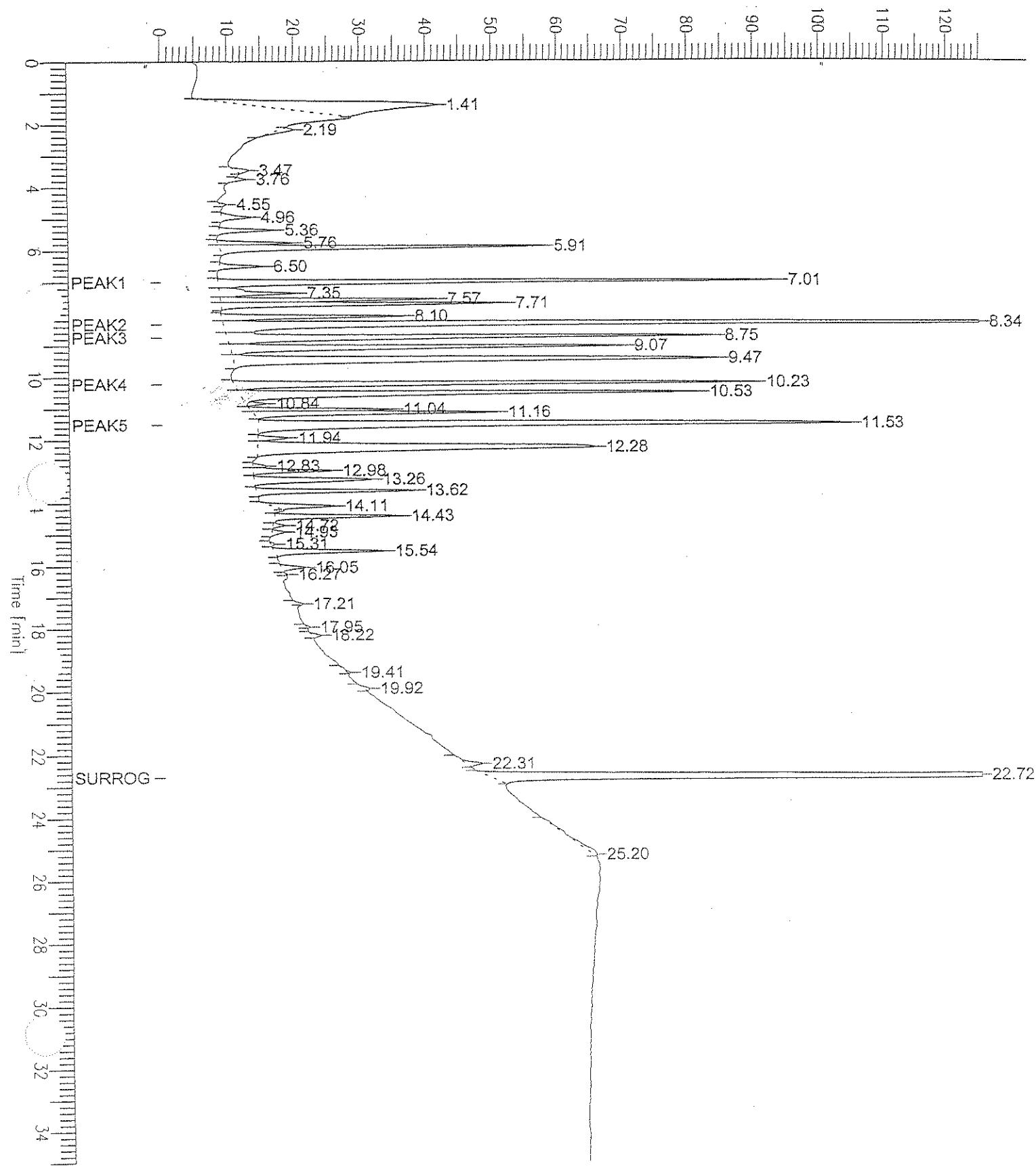
Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
11	7.007	549146.30	BV	Peak1	75.8627	75.8627
16	8.336	1134517.49	VV	Peak2	72.8943	72.8943
17	8.751	580454.53	VV	Peak3	77.5632	77.5632
20	10.226	558669.73	BV	Peak4	72.9034	72.9034
25	11.525	883228.58	BB	Peak5	65.3119	65.3119
	3706016.62				364.5355	364.5355

Chromatogram

Sample Name : 1242-50
File Name : C:\TC4\LEO\W25P027.raw
Method : 1242
Time : 0.00 min End Time : 35.00 min
Plot Offset: 0 mV

Sample #: 27 Page 1 of 1
Date : 6/1/00 07:59 AM
Time of Injection: 5/26/00 07:22 AM
Low Point : 0.00 mV High Point : 125.00 mV
Plot Scale: 125.0 mV

Response [mV]



Software Version: 4.1<2F12>

Sample Name : Method Blank

Time : 6/1/00 07:59 AM

Sample Number: 28

Study : Blank

Operator : LVT

Instrument : AUTOSYS_-_0:A

Channel : A A/D mV Range : 1000

AutoSampler : BUILT-IN

Rack/Vial : 0/28

Interface Serial # : NONE Data Acquisition Time: 5/26/00 08:02 AM

Delay Time : 0.00 min.

End Time : 34.99 min.

Sampling Rate : 6.2500 pts/sec

Raw Data File : C:\TC4\LEO\W25P028.RAW

Result File : C:\TC4\LEO\W25P028.RST

Inst Method : C:\TC4\DATA2\1242 from C:\TC4\LEO\W25P028.RST

Proc Method : C:\TC4\DATA2\1242.mth

Calib Method : C:\TC4\DATA2\1242.mth

Sequence File : C:\TC4\LEO\MAYPE.SEQ

Sample Volume : 1.0000 NG/UL Area Reject : 0.000000

Sample Amount : 1.0000 Dilution Factor : 1.00

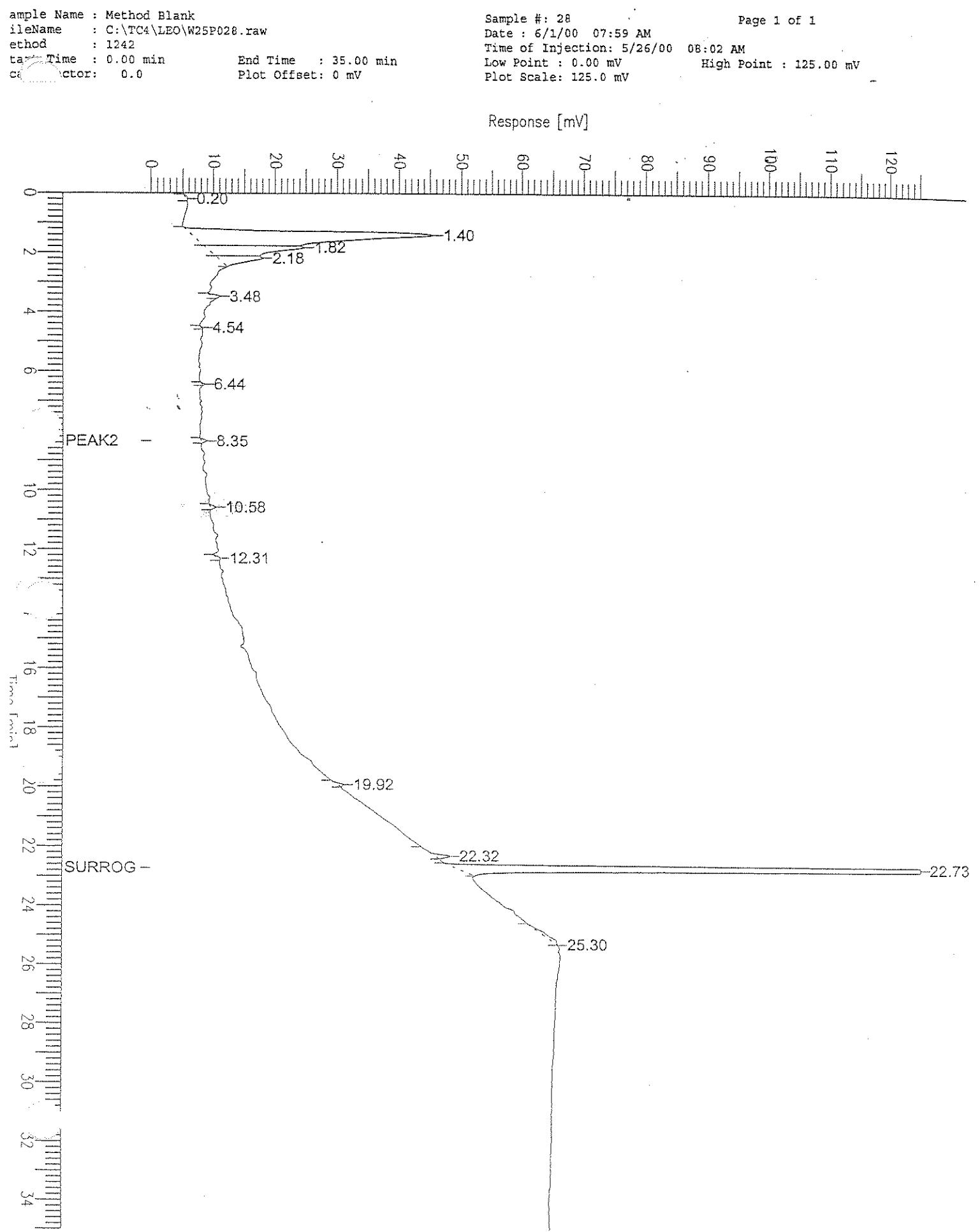
1242 (s=mg/Kg, h2o=ug/L, wipe=ug/100cm²)

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
	8.353	5214.12	Peaks		0.1013	0.1013
13	22.728	1996199.25	BB Surrogate		0.0416	0.0416
	2001413.37				0.1429	0.1429

Group Report For : Peaks

Peak #	Time [min]	Area [μ V·s]	BL	Component Name	Raw Amount	Adjusted Amount
0	7.036	0.00	Peak1		0.0000	0.0000
8	8.353	5214.12	BB Peak2		0.3350	0.3350
0	8.779	0.00	Peak3		0.0000	0.0000
0	10.266	0.00	Peak4		0.0000	0.0000
0	11.557	0.00	Peak5		0.0000	0.0000
	5214.12				0.3350	0.3350

Chromatogram



**EXTRACTION LOG
ROOM TEMPERATURE AND
HOT TEMPERATURE**

Hot & Room Temp Extraction Sheet

Prep. date: 5/31/00
 Analyst ID: G02Q
 SA = Unspiked Sample

Solvent: Hexane
 Manufacturer: EM Science
 Lot #: 39167

O 033

Sample ID	Sample Vol (mls)	Surrogate ID	MS/MSD ID	Final Spike Volume (mls)	Comments
Blank					
LCS 9201	120	SA			
		-MS			
		MSD			
wipe #13 before Cleaning	1-wipe	5ml			
Verify Coating #13					
From 4hr Soln #13					
" " "#1					
" " "#2					
" " "#3					
" " "#4					
" " "#5					
" " "#6					
" " "#7					
" " "#8					
" " "#9					
" " "#10					
" " "#11					
wipe #13 before Cleaning	1-wipe	5ml			
Verify Coating #120					
From 4hr Soln #13					
" " "#1					
" " "#2					
Sep Pak					
Water					
Lot #					

Sep Pak
 Water
 Lot #

H2SO4 Manufacturer:
 Lot #

All samples are cleaned with sulfuric acid (5mls H2SO4 25ml extract)
 Baker
 L15038

LCS Manufacturer:
 Lot #

EM A
 9201

PCB WIPES EXTRACTION LOSSES

Prep. date: 5/31/00
Analyst ID: 6-0728
SSA = Unspiked Sample

Solvent: Hexane Manufacturer: _____
Lot # _____

034

SA = Unsiked Sample

Sep Pak
Manufacturer Waterson
Lot # WATSON

All samples are cleaned with sulfuric acid (1:1) ~~soaker~~
H₂SO₄ Manufacturer: J.T. Baker
Lot # L15Q32

extract)
LCS Map
Lot #

ef) Manufacturer: ERA
9201

F:\LAB\PELW.WK4

rev. 1.0 03/31/2000

QC BATCH:

